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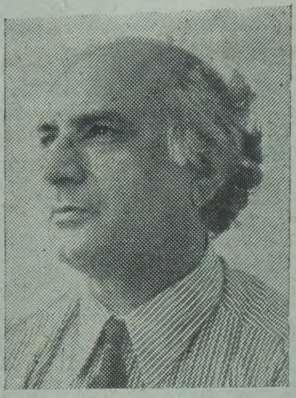
PEOPLE

Mr Duleep Singh has been elected chairman of the Fertiliser Association of India (western region).

Mr M. N. Buch has been deputed as executive director (marketing) to the Gujarat State Fertilizers Co Ltd.

Mr Hiro Shroff has joined the Bank of America as its communications officer for India. He was previously a foreign correspondent of the Press Trust of India.



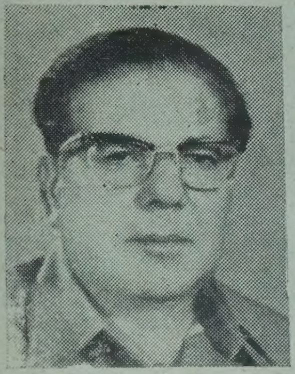
Hiro Shroff

Mohinder Puri

Mr Mohinder Pal Puri, recently elected president of the Punjab, Haryana and Delhi Chamber of Commerce and Industry for the year 1981-82, is a qualified chartered accountant and also holds a degree in law. Mr Puri is a director of several companies and was first elected to the managing committee of PHD Chamber in 1968. Since then he has been continuously associated with the chamber and became its vice-president in 1980. Besides, he is also on the managing committee of Assocham.

Mr M. Chandramouli Reddy, IAS, has taken over as the vice-chairman and managing director of Andhra Pradesh Small Scale Industrial Development Corporation Ltd. Till recently Mr Reddy was the commissioner of the endowments department of the Government of Andhra Pradesh. He was also previously chief secretary to Pondicherry Government, and chairman and managing director of Andhra Pradesh Steels Ltd and Republic Forge Ltd.

M. C. Reddy



V. S. Kapoor

Mr Mahendra K. Sanghi of Sanghi International Travels has been re-elected president of the Travel Agents Association of India. Mr Karan B. Sarwal of Thomas Cook (India) Ltd was also re-elected vice-president.

Mr J. J. Mehta has been elected chairman of the Manmade Fibre Spinners Association.

Mr V. S. Kapoor has been promoted general manager (planning and development) at the State Bank of Bikaner and Jaipur.

Mr Vidya Rattan Kapoor, a technocrat, has been elected president of the Bombay Industries Association. A graduate in chemical engineer, Mr Kapoor was associated with various companies from 1952 to 1962. In 1962 he set up his own industrial unit, called Union Paint and Chemical Co at Bombay which has grown into a leading supplier of paints, primers, coatings and finishings, lubricants, fire cements and refractory concrete.

V. R. Kapoor

THE WEEK

The Public Investment Board has cleared the proposal for the Rs 300-crore phosphatic fertiliser project to be set up at Paradip (Orissa). It will have a capacity of 3,00,000 tonnes per annum. ★

A broad agreement is understood to have been reached over complete take-over of Oil India Ltd by the Central Government. The take-over will be effective retrospectively from January 1, 1977. At present the Government is a partner with Burmah Oil Co in this company. ★

State Bank of India proposes to deploy additiona credit of Rs 59 crores this year for the priority sector specially small farmers and industrial units. Till March last Rs 236 crores were provided to farmers and industries out of total disbursements of Rs 278 crores t the priority sector. ★

Non-receipt of dues from Tamil Nadu State Electricity Board is reported to have threatene Neyveli Lignite Corporation at Cuddalore with immediate closure. Outstandings are said to have accumulated to about Rs 32 crores. ★

International Airports Authority of India ha bagged a Rs 35-crore contract for stage II development project at Brak airport in Libya. IAAI als completed the first stage work costing Rs 22 crores. ★

The non-availability of steel at international pric is reported to have cost the engineering goods exporters dearly in that they have lost new oversea orders to the tune of Rs 200 crores during the last fiv months. The Government had promised supply o steel at international price and also protection t engineering goods exports from steel price increas which came about on February 9. ★

The Association of Indian Engineering Industr will send a study team to Uganda in October to identify areas of industrial co-operation. ★

The fifth atomic power station of India to be se up at Kakrapur in Gujarat will have four reactors o 235 mw each. Initially, however, the Atomic Energ Department will commence construction on tw reactors costing about Rs 383 crores. ★

Wholesale price index

At 279.1, the latest available wholesale pric index for the week ended June 20, 1981 showed a ris of 0.5 per cent over the preceding week and 12.0 pe cent over the year.

Money comfortable

Conditions in the Bombay short-term mone market as of Monday (July 6, 1981) were comfortabl Both notified and commercial funds were renewed 9 per cent while fresh money was transacted at per cent.

COMMERCE

. . . But what about government consumption?

WITH the economy still bedevilled by potential hyper-inflation the Government had no other alternative but to take a few harsh steps which could possibly contain powerful inflationary forces. Inflation has shattered the fabric of the Indian economy. It has also shattered industrial relations and destroyed the peace of our kitchens. So any step that the Government takes to curb inflation must be welcomed. The measures that the Government announced on July 11 were: It increased the Bank rate by 1 per cent. It also increased the quantum of compulsory deposits to be paid by income-tax payers with incomes of above Rs 50,000. It also took measures to curb *benami* deposits. The Income-tax (Amendment) Ordinance issued on July 11 now requires banks, companies, cooperative societies and partnership firms to repay deposits made with them by account payee cheques where such deposits amount to Rs 10,000 or more. Before the measures were announced the Government had increased petroleum and urea prices. The upward revision of petroleum prices came within less than six months, the last revision being in January 1981. This will yield yearly Rs 1,200 crores to the exchequer. Another Rs 900 crores will be added to Government revenue as a result of the measures announced on July 11. So it is estimated that the Government revenue would increase by about Rs 2,000 crores. Some amount may be by way of straight income while some amount may go to the government coffers by way of purchase of securities.

There is no doubt that because of the rise in petroleum prices it would increase the prices of all goods and services which use industrial and other oils. The idea behind the hike in petroleum prices seems to curb the growth in consumption of petroleum products which even in 1980-81 was 31 million tonnes. The oil price increase may also encourage the use of alternative sources of energy like coal. The second reason behind the hike in petroleum prices is, of course, revenue. When the Government has decided to expand oil exploration and drilling in a big way, the resources must be found for this. From this point of view also the increase in oil prices could be justified.

This then is a welcome start. The Government has made a good beginning in trying to curb inflation. While moderating demand, the Government has not ignored the supply blade of the scissors. The decision to import wheat, sugar and edible oils at the reported foreign exchange cost of Rs 1,000 crores may look absurd at a time when foodgrains output is likely to be bumper. But the record of procurement continues to be dismal. As against the procurement target of 9.5 million tonnes the actual procurement so far is only 6.5 million tonnes. And it is unlikely to exceed seven million tonnes during the entire 1981-82 marketing season. In these conditions it is necessary that imports of foodgrains are made at a time when world foodgrain prices are relatively attractive for importers. But the Government's programme to export rice seems to be short-sighted.

But the Government has not answered the major question of rising government expenditure. The Government should also assure the people that it will not only curtail its expenditure but it will also curtail the consumption of such goods as cement, paper, cloth, petroleum products and steel. If the belt is to be tightened the beginning should be made by the Government especially when the government expenditure today has gone up to a staggering height of Rs 35,000 crores a year, in other words, nearly 27 per cent of our national income. In announcing these measures, the Finance Minister, should have first assured the people that he would also cut government expenditure so that at least the Central Budget would now be balanced. It is deficit budgets which influence bank credit to the government sector. It is true that bank credit to the commercial sector increased by Rs 6,100 crores during the year ending June 26, 1981. But net bank credit to government sector increased during this period by as much as Rs 6,500 crores. While most of the credit to commercial sector is for productive purposes the same cannot be said about the bank credit to government sector. The Government has to rely on bank credit because of record breaking budgetary deficits in recent years. In 1978-79 budget deficit was Rs 1,500 crores and in the subsequent year (1979-80) it rose to Rs 2,400 crores and in 1980-81 it was about Rs 2,000 crores. In the current financial year the Finance Minister has again left the budgetary gap of as much as Rs 1,500 crores. But because of the lower sale of bearer bonds the budgetary deficit would again go up to Rs 2,000 crores.

So unless the Government discards the inflationary strategy of financing development and public expenditure, we will continue to have uncontrollable inflation with us. People have suffered not because there was not enough growth, not because the supply side was very weak, but because the Government increased money supply far out of proportion to the increase in real national income. Unless this problem of fiscal irresponsibility is tackled, even the boldest anti-inflationary measures will continue to remain ineffective.

ANTI-INFLATIONARY PACKAGE

New phase in dear money policy

By OUR SPECIAL CORRESPONDENT

BOMBAY

IN a bid to control inflation, which is still running at the rate of 12 per cent, the Government of India announced monetary and financial measures which include a hike in the Bank rate by one per cent and compulsory deposits under the Income Tax Act at higher rates for income groups above Rs 50,000. New Delhi also issued an ordinance to amend the Income Tax Act which makes it compulsory for banks, companies, co-operative societies and partnership firms to repay deposits made with them by any person by account payee cheques or bank draft where the amount of deposits together with interest is Rs 10,000 or more. The savings and current deposits will not come under the purview of the ordinance but the measure is expected to unearth *benami* deposit accounts. It is hoped thereby that black money transactions which are one of the causes of inflation will be checked.

The announcement of the rise in Bank rate from nine to ten per cent came from the Reserve Bank of India (RBI). It became effective from the close of banking business on July 11. The Bank rate hike is not as stiff as in 1974 when it was raised from seven to nine per cent in the anti-inflationary package then announced. Some industry spokesmen have reacted strongly by saying that trade and industry would be affected adversely as the credit would be costlier and restricted. But others point out that the Bank lending rates are already high and this was an exercise by the RBI to bring the Bank rate in line with the lending rates.

Credit is expected to be restricted for industry because simultaneously the RBI has raised the Statutory Liquidity Ratio (SLR) of banks from 34 to 35 per cent in two phases—from 34 to 34.5 per cent from September 25 and 35 per cent from October 30. Also the RBI has advanced the effective date of the rise of the second phase of the increase in the cash reserve ratio from September 11 to August 21. In May 1981, the RBI had already announced that the cash reserve ratio of scheduled commercial banks would be raised from six to seven per cent of net demand and time liabilities in two stages of six to 6.5 per cent by July 31 and to seven per cent by September 11. These two steps are expected to impound Rs 800 crores from the liquidity of the banks.

Simultaneously the Reserve Bar has also taken measures to tighten th control on selective credit. The RB has directed banks that the minimu margin against stocks of wheat, padd rice and other foodgrains should b raised with immediate effect by 10 pe centage point across the board with th exception of advances to roller flo mills.

A Reserve Bank press release sa that these anti-inflationary moneta measures had been taken "with a vie to contain inflationary pressures". Th overall monetary and credit trends we reviewed in May 1981 and certain p licy measures were announced by th RBI to control the growth in liquidi in the economy. "More recent trend indicate no abatement of the pace monetary expansion", the RBI said. Th pace of monetary expansion (M-3)

Changes in Bank rate (a) in India : 1938-39 to 1981-82

Year	Bank rate (per cent per annum
1938-39	3.0
1950-51	3.0
1956-57	3.5
1957-58(b)	3.5—4.0
1958-59	4.0
1959-60	4.0
1960-61	4.0
1961-62	4.0
1962-63 (c)	4.0—4.5
1963-64	4.5
1964-65 (d)	4.5—5.0—6.0
1965-66	6.0
1966-67	6.0
1967-68(e)	6.0—5.0
1968-69	5.0
1969-70	5.0
1970-71(f)	5.0—6.0
1971-72	6.0
1972-73	6.0
1973-74(g)	6.0—7.0
1974-75(h)	7.0—9.0
1975-76	9.0
1976-77	9.0
1977-78	9.0
1978-79	9.0
1979-80	9.0
1980-81	9.0
1981-82 (July 12, 1981) (i) ..	10.0

Notes: (a) The rate at which the Reserve Bank India (RBI) is prepared to buy or redi count bills of exchange or other comme cial paper eligible for purchase under th RBI Act. This is also the rate of intere charged by the RBI to commercial ban on their borrowings from the RBI.
(b) Raised to 4.0 per cent from May 1 1957; (c) Raised to 4.5 per cent from Jan ary 3, 1963; (d) Raised to 5.0 per ce from September 26, 1964 and to 6.0 p cent from February 17, 1965; (e) Lowere to 5.0 per cent from March 3, 1968; Raised to 6.0 per cent from January 1971; (g) Raised to 7.0 per cent from Ma 31, 1973; (h) Raised to 9.0 per cent fro July 23, 1974; (i) Raised to 10.0 per ce from July 12, 1981.

Benami deposits

By OUR FINANCIAL CORRESPONDENT

BOMBAY

WHILE the Government's decision that repayment of deposits of Rs 10,000 and above by companies, banks, co-operative societies and partnership firms should be made by account payee cheques or drafts only is well intended, doubts are raised about its practicability. This is one more step to bring *benami* deposits with banks or companies into the tax net and curb the growth of black money after the Special Bearer Bonds Scheme which netted about Rs 390 crores. So far so good. However, the measure does not seem to be foolproof. There are a few loopholes. Unless they are plugged, this decision would not yield fruitful results.

Now that the limit for repayment of deposits through cheque has been fixed at Rs 10,000, the deposits may be in more than one *benami* account in small segments of say Rs 7,000 or Rs 8,000 so that along with interest the amount to be repaid does not exceed Rs 10,000. Secondly, those who receive account payee cheque by way of repayment would open a new account, encash the cheque and close the account. Perhaps, the number of new bank accounts might increase and to that extent it would involve unproductive labour for bank employees. Today there are about more than two crore deposit accounts in the country and it is going to be a Herculean task to scrutinise a number of small bank accounts closely.

There is one more danger. Perhaps hereafter profiteers and blackmarketeers would prefer to invest in hoarding commodities to yield quick money. In the days of rising prices this will be a paying proposition. The purpose of unearthing black money may or may not be served, but this would certainly act as a fuel for inflation.

1980-81 was 18 per cent against 17.3 per cent in 1979-80. The growth of M-3 in the early months of 1981-82 up to June 1981 indicates a rate of expansion of 4.4 per cent against four per cent in the corresponding period of the previous year. The growth of non-food credit in the first quarter in the current financial year (up to June 26, 1981) also gives "cause for anxiety" with an increase of Rs 587 crores (2.5 per cent) against Rs 221 crores (1.1 per cent) in the corresponding quarter of the previous year.

Date from which effective	Rate (Per cent per annum)
Up to November 14, 1951	3.0
November 15, 1951	3.5
May 16, 1957	4.0
January 3, 1963	4.5
September 26, 1964	5.0
February 17, 1965	6.0
March 3, 1968	5.0
January 9, 1971	6.0
May 31, 1973	7.0
July 23, 1974	9.0
July 12, 1981	10.0

Commerce Research Bureau .. ..

A new phase of dear money policy would thus seem to have begun. The increase in the Bank rate will have an impact on the structure of bank lending rates as they are linked to Bank rate. Automatically the lending rates will go up by 1 per cent though in the past deposit and lending rates of banks have been increased without a change in the Bank rate. The absence of an indication from the Reserve Bank as to whether the lending rates will go up further is no pointer that the Reserve Bank and the Central Government might not change their minds. They could as well put a ceiling on the existing levels though lending agreements link the lending rates to the Bank rate.

It is interesting that, in May 1981 when the cash reserve ratio of the banks was changed, it was explained that the money would remain with the Reserve Bank and not be invested in government securities. This time the statutory liquidity ratio has also been raised and this will mean more resources from the banking system to the Government. Bankers have commented that the Government will have to be careful about its expenditure and investment policy for they have an important bearing on inflationary forces. As for the banks themselves their profitability is expected to go down with the impounding of Rs 800 crores of funds and the rise in the Bank rate to 10 per cent unless, of course, the Reserve Bank permits the banks to raise their lending rates further.

The Income Tax (Amendment) Ordinance, 1981, as explained earlier, provides that banks, companies, co-operative societies and partnership firms **will be required to repay deposits made** with them by any person by account

Continued on page 108

Price of bank money goes up

By S. G. SHAH

Our Banking Correspondent

A ten per cent Bank rate, a further increase in SLR (statutory liquidity ratio) and an earlier increase then announced in CRR (cash reserve ratio) will have a double effect on bank money: its price will go up and availability will go down. Banks will also find a double effect on their profitability—earnings from advances will go up because of the higher rates on lower credit outstanding, but these will be counterbalanced by lower earnings on higher liquidity and cash reserves.

The borrowers will find that lesser money is available at higher costs and there will be much more haggling on the purpose and the amount of bank credit.

The net position has still not crystallised because bankers are meeting the Reserve Bank Governor on July 17, to sort out the implication of the new Bank rate on the interest rates structure of deposits, commercial advances and priority sector advances. The meeting will also have to define how bank credit will have to be rationed in practice—by freezing the accounts or by applying an all across-the-board 10 to 20 per cent cut in peak utilisation, or by a selective purpose rise utilisation—checking uses of inventory build up or speculation and allowing normal uses for productive purposes. As happens on all such occasions in the past, there is no empirical evidence nor are there criteria to determine the distinction between speculative and productive purposes. It is also a matter of opinion where credit adds to production and where it adds merely to speculation. Thus even after Friday (July 17) guidelines given to bankers by RBI, the borrowers and bankers, they will continue to be a subject of continuous debate.

Meanwhile, three points are clear. There has been an 18 per cent rise in money supply, deficit financing has been large and neither RBI nor the Government had an alternative to raising the interest rates. Second, at present, since all lending rates are linked to Bank rate, all of them will go up by 1 per cent except those where the ceiling rates apply. But it is reasonable to expect that by the end of this week, the RBI will raise the ceiling rates also. Third, business and industry are again served a notice that they cannot rely on bank funds to finance their inventories and current assets because banks have less funds and other more pressing priorities, just as they cannot now rely on institutional agencies for term finance because they have no funds. The ultimate rationale of all this debate and measures is two-fold. First, it should encourage or induce borrowers to economise in the use of funds. In fact it does not. In inflationary times like this, borrowers find it more profitable to use bank credit for speculative purposes rather than for productive purposes. Therefore rather than promoting economy in the use of bank credit, such extreme tightness promotes a diversion towards undesirable uses of bank credit.

Second, it should encourage banks to look for more economical and efficient ways of management to compensate for thinning margins on funds. This is not so impossible or visionary a task as it might appear to be or as it made out by the banks. Even within the banking spectrum there are some institutions that make better profits through efficiency of funds management or general management and through better systems and more economical procedures. They set up targets for the other banks to follow. But in practice even this does not happen. Banks have found a convenient excuse in saying that they are making losses due to "priority sector lending" although in practice evidence is plenty to show their inefficiency in management.

It is necessary to force bank managements to consider the problem of efficiency more seriously. In part, every time funds margin are squeezed, the burdens are passed on to the borrowers or depositors or both and banks get a reprieve and forget or neglect about efficiency. Once in a while it is necessary to ask banks to absorb the new burdens through better financial management and general efficiency.

LETTER FROM LONDON

FRANK BROADWAY

Gentle recovery

AS evidence continues to accumulate that the British economy is either at or past the turning point between decline and gentle recovery, debate is switching to the longerterm options which might improve performance during the rest of the decade. Mrs Thatcher's Government has characteristically rejected calls for greater protectionism and for reflation through increased public spending, and quietly implements its medium-term financial strategy and develops the measures announced in the March budget.

These measures included further reductions in public expenditure, and continued control of the growth of the monetary aggregates within a target range slightly below that set for the fiscal year 1980-81.

The Treasury has asked Departments to prepare two sets of options for cuts in cash spending : three per cent and five per cent in 1982-83, and five per cent and 7½ per cent in 1983-84. Ministers have been asked to review all the activities of their Departments, and to consider relinquishing some less essential functions.

The Cabinet will decide the cuts to be made in the autumn. It is accepted that some of these decisions will be contentious, but it has always been a tenet of the Government's philosophy that public expenditure must be curbed to allow resources to flow into the wealth-creating private sector.

Statistics of monetary growth have been distorted by sporadic industrial action by some civil servants, which has delayed collection of substantial tax amounts. The estimated growth of £M3, after correction for distortions, was about 0.75 per cent in April, an annualised growth of 9-10 per cent, which is within the Chancellor's target of 6-10 per cent, expansion in the 14 months to April next year.

This stability in monetary growth might have prompted hopes of a further cut in British interest rates, after the two per cent reduction to 12 per cent in the Bank of England's minimum lending rate announced in the budget. The recent escalation of American prime rates, and the generally unsettled conditions in world money markets appear to have ruled out any such reduction for the time being.

With an eight point interest differential between London and New York, sterling naturally has fallen against the dollar. During May it touched its lowest levels since the autumn of 1979, although it held up well against other major trading currencies.

There is some evidence that the pressures which kept sterling so strong during the last twelve months are now easing. The April banking figures indicated a modest outflow of sterling from the private sector. British businessmen welcome this easing of pressures and it is still government policy to allow the exchange rate to move in line with market forces.

The official view was reiterated last month in a policy document on trade. Replying to a report earlier this year from a House of Commons Committee on industry and trade, the Government reiterated its exchange and interest rate policies. It also rejected demands for specific protective measures against imports and reaffirmed support for open market trading. This support does not preclude action against dumping when it is justified, including the use of international remedies through the General Agreement on Tariffs and Trade of the European Commission.

Controlling inflation as the basis for soundly based economic growth remains the priority. In April, the annual rate of increase in retail prices fell by 0.6 per cent to 12 per cent, despite the impact of the increases in indirect taxes announced in the budget. The prospect is that the annual rate of increase will continue to decline but at a slower rate, reaching about 10 per cent towards the end of the year. Recent moderate wage settlements should help to hold the rise in retail prices at an acceptable level.

Like the retail prices index, the other major economic indicators seem to be moving gently in the right direction. After rising by 0.8 per cent in February, industrial output fell by 0.4 per cent in March, but the detailed industry analysis suggests that restocking may be starting. Chemical industry output, which normally turns up early in the course of economic recovery, was 1.8 per cent higher in the first quarter of 1981 than its low point in the third quarter of last year.

The engineering industries can however take some comfort from the fact that the latest estimate of capital spending suggests a four per cent fall this year, instead of the six per cent drop indicated by a survey at the end of last year. The motor industry is also forecasting in five per cent increase in sales next year.

Retail sales rose 0.9 per cent in April, in contrast to gloomy initial claims by critics that the budget would prove contractionary. It is reasonable to expect that people will now save less as inflationary expectations diminish, leaving more money for spending, so there should be no major impediment on the demand side to gradual recovery.

Even the unemployment figures show some modest hope. The seasonally-adjusted adult unemployment total rose by some 60,000 in May to 2.51 million.

The general statistical picture is thus consistent with the start of economic recovery, but nobody is expecting any dramatic upturn this year. After the exceptionally severe recession, progress is likely to be slow and patchy, and unemployment is expected to continue to increase, though at a slower rate, for the rest of this year.

Now that manufacturing industry has closed down a good deal of marginal capacity and tackled its overmanning problems, some relatively small increases in sales volume can be expected to produce significantly higher levels of profitability. This will be good for the economy, but it means that employment will not increase appreciably until a large measure of recovery has been achieved.

Longer-term and essentially gradual measures will have to play their part in easing the unemployment problem in Britain. Two of them come into action this month. On June 1, the new scheme announced in the Budget for commercial banks to make loans of up to £75,000 to small businesses against a government guarantee, came into operation. On June 11, Britain's first enterprise zone, an area in which businesses receive tax concessions and substantial freedom from bureaucratic restriction, was opened in Swansea in South Wales.

EDITOR'S NOTEBOOK

Vadilal Dagli

GOLD prices have started again tumbling down. The first week of July was the worst week for gold hoarders. On July 8 gold pierced the barrier of $ 400 and closed at $ 398 an ounce—the lowest price in 18 months. There is a co-relation between the strength of the US dollar and the price of gold. As the US dollar is strengthening the gold price is going down. There is also a co-relation between high interest rates and gold. As interest rates have climbed above 20 per cent in the United States, gold has lost its value as an investment. As a West German financial expert put it: "The dollar has risen like a Phoenix from the ashes. If at the beginning of the year anyone had predicted that dollar in a few months would be just under 2.50 Marks in value he would have been laughed at". Since last September when gold price was $ 750 an ounce its price has been falling gradually. On September 31, it was $ 591.30; in January 1981, the price fell by more than $ 100 and it closed at $ 481 on February 2. For the next four months, gold prices remained steady between $ 468 and $ 550. But since the last week of June it has started falling. On June 22 it was $ 464 and in nine trading days of June it lost $ 66 and on July 8 it fell to $ 398. Though the gold price has slightly recovered, the speculators have lost faith in gold.

Although Americans had started unloading gold since last September, Europeans were holding out in the hope that interest rates in the United States would come down and inflation rate in that country would again rise to two digit figure. But this has not happened. Now Europeans are nervous. They are unloading gold. An American expert has commented that "Europeans are baling out. Many people view $ 400 as an important psychological level, They are talking $ 375-380. The Europeans have been pushing it down like crazy". Several factors besides high interest rate and the strong dollar have contributed to pushing down the prices of gold. Firstly, high-yielding government securities have also adversely influenced gold prices. Expectations of gold prices going up to $ 1,000 an ounce were also exaggerated. The Soviet Union which is buying grains and butter from the West is selling gold. South Africans who are the main suppliers of gold had to sell more gold during the recent months because lower gold prices created balance of payments difficulties for them. So gold today is no more a traditional attraction as an investment item in the West. Gold mining companies have been saying that if the prices of gold go below $ 400, it may not be economical for them to mine more gold.

Whatever may be the future of gold mining, one thing seems to be certain. Gold which rose to dizzy heights in the seventies has been climbing down in the beginning of the 80s. What about India? While gold prices are declining in the west, Indian gold prices are not going down to that extent with the result the price differential in gold between the London and Bombay markets has been increasing. For instance, on June 26 gold price for 10 gm in Bombay was Rs 1,635 as against Rs 1,237 in London—a difference of Rs 398. On July 7, gold price in Bombay was Rs 1,650 whereas in London it was Rs 1,157—a difference of Rs 493. Some observers, however, believe that gold may stage a recovery, but that may be marginal. At present it seems that the gold fever has abated.

★

"FACTS have proved that it amounts to sheer illusion to suppose that socialism can be built by deliberately preventing people getting rich. It is equally absurd to maintain a low level of income for people in relatively prosperous areas or units to prevent a possible polarization of society."

Who wrote this para? Reagan, Margaret Thatcher or a spokesman of Forum of Free Enterprise? None. It is from an article published by a leading Chinese communist journal with official blessing. China has now realised that individual initiative and free enterprise have an important role to play in economic development. They have now discarded the machinery of central planning, which was the replica of Soviet planning. Equality and egalitarianism is now described as an "anti-socialist error". The new rulers have recently rehabilitated more than seven lakh small businessmen who were described by Mao as capitalist exploiters.

But rethinking that has been initiated by the all powerful Mr Deng Xiaoping, Vice-chairman of the Chinese Communist Party, has accepted financial incentives, individual initiative and even inequality as necessary stimulants to economic growth. Mr Deng does not mean that a new class of rich will emerge. But what he means is that China will accept a mixed economy. The Chinese economy is in a crisis. The recent World Bank report has pointed out that China has remained quite backward in most of the major industries. Its administration is bureaucratic and its planners are inefficient in the use of energy. The Government has permitted free enterprise in agriculture, in industry and in trade. But the first condition is that it must meet the quotas that are being fixed by the planning authority. Having met the quotas these enterprises will be free to produce and market the rest of their produce as they wish. Under the Soviet system there is no incentive to fulfil the norms. The Chinese set the norms which are 20 to 40 per cent below production capacity.

So an entrepreneur or a farmer or a trader knows that he has enough margin to sell his goods. About 6,000 enterprises are participating in this experiment. These enterprises are told to keep foreign exchange earned by them for importing foreign technology or raw materials. They are also authorised to decide as to how much bonus they should pay to the workers. They have been given power to penalise workers and managers who cause heavy losses to the State.

A similar system is being introduced in agriculture. The production teams are broken down into smaller groups, even individual families and they work on a sort of a contract system. This leaves them with freedom to use their time as they wish, to decide on the best crops to plant and to work for themselves when their quotas have been met. In addition, private plots have been permitted to take 15 per cent of the land instead of 7 per cent in the past. All that is produced above the targets comes into a free market. Small private enterprises are permitted to employ up to two people besides the members of their families. This has been welcomed by consumers. The service industry was breaking down as there was dearth of tailors, shoemakers, washermen as also repair shops. The Chinese rulers have been forced to take these measures because the economy was showing signs of collapsing. Inflation has also been rising. Out of nearly 100 million urban workforce 25 million are out of jobs.

New phase in dear money policy

Concluded from page 105

payee cheques or account payee bank drafts, where the amount of such deposit repayable together with interest, if any, is Rs 10,000 or more. However, banks including co-operative banks will be permitted to repay any deposit made with them by a person who has an account with the bank by crediting the account of such person. Failure to comply with this requirement will involve imprisonment for a term up to two years and a fine of an amount equal to the amount of the deposit.

The second ordinance, the Compulsory Deposit Scheme (Income Tax payers) Amendment Ordinance, 1981, raises the rates of compulsory deposit in the case of persons in the higher groups as a measure for restraining conspicuous consumption. The new rate of compulsory deposit for persons with current incomes in the range of Rs 50,000 to Rs 70,000 will be 15 per cent as against 12½ per cent hitherto and the rate of compulsory deposit in respect of incomes exceeding Rs 70,000 will be 18 per cent as against 15 per cent hitherto. The new rates will apply in relation to the assessment year 1982-83 and 1983-84. The rates of compulsory deposit in respect of current income up to Rs 50,000 have not been changed.

The anti-inflationary package as announced does not put curbs on dividends, as was widely expected, and also does not seek to impound half of the dearness allowance of government employees, as was believed to be the inclination of the Government. Reportedly there was opposition from some of the Cabinet Ministers to the second proposal.

As far as dividend freeze is concerned, it would appear that the Government feared that the investment climate would be disturbed. The Finance Minister, Mr R. Venkataraman and recently Mr N. N. Pai, chairman of the Industrial Development Bank of India, have talked about the need for large houses in particular and the corporate sector in general not to rely on financial institutions for their capital requirements. They have been asked to depend more on making rights or debenture issues or raising the equity needed. The Government's decision has to be appreciated in this context.

COSTLIER PETROLEUM PRODUCTS

Accelerated oil exploration programme?

By D. B. MAHATME

THE Government of India seems to have taken the immediate risk of increase in transport, industrial and household costs in announcing a steep rise in the prices of petroleum products with an eye on long-term benefits that could accrue. Hefty increases in the prices of petrol, high speed diesel oil, kerosene, cooking gas and furnace oil have been announced with effect from July 11. The increase in the price of petrol will be 53 paise per litre and of kerosene 15 paise. The price of high speed diesel oil has been pushed up by 32 paise per litre and that of furnace oil by Rs 235 per kilo litre. Cooking gas will cost Rs 5 more per cylinder of 15 kg.

The hike in the price of petroleum products has come in for severe criticism from industry and business and a large body of newspapers have called it an ill-advised move. No one seems to be convinced by the justification advanced by the Government that the prices have been increased on account of the steeply rising cost of exploration and development programme, the need to moderate the growth for demand for petroleum products and to promote their economic and efficient use. The Finance Minister, Mr R. Venkataraman's statement that he expected the consumption of crude to go down by at least one million tonnes from imported 15 million tonnes has not also made any impact.

And yet the increase in the prices of the petroleum products should have come as no surprise. The Sixth Plan document had cautioned that, in parallel with action on technological front, an appropriate energy pricing policy would have to be followed in order to induce economies in the use of energies in all sectors and encourage the desired forms of inter-fuel substitution. In the past, it said, the pricing of energy had not reflected either the true costs to the economy or helped to ensure the financial viability of energy industries and this situation could not be allowed to continue for long. Further, it was wrong to think that an adjustment in the prices of basic input like energy would aggravate the inflationary situation. The costs to the economy were not reduced by not reflecting them in proper pricing and "indeed, the continuance of wrong pricing policies has a far more deleterious effect on the health of the eonomy than is often realised". Again "given the pressure of international oil prices and rising domestic energy cost the high priority will have to be given early in the Plan period to the evolution of a structure of energy prices which reflects true costs, encourages economy in energy use and promotes replacement of scarce fuels".

Can an increase in prices lead to a curb on the growth in consumption of petroleum products? The recent experience would suggest that the Finance Minister, Mr R. Venkataraman, had some basis in expecting that imports of crude oil could be reduced. During 1980-81 demand for petroleum products did not turn out to be as high as expected. As against the anticipated 33 million tonnes, the demand rose only to 31 million tonnes from 29 million tonnes in 1979-80, or it rose by only 6.2 per cent. One reason could be the hike in prices of petroleum products made in last January though it cannot be said with certainty that was all the explanation for the fall from the anticipated demand. The difficulty is that consumption of petroleum products is not that elastic. But it must be conceded that industry and other sectors will be forced to make more efficient use of petroleum products than has been the case so far. This point has been sought to be driven home by organisations like the Association of Indian Engineering Industry, All India Manufacturers' Organisation and Bombay Chamber of Commerce and Industry, at seminars held by them for the benefit of their industry members. The transport sector could also make better use of the oil products and not waste them if only the design of the engines is improved and their maintenance is looked after well.

Some reports have suggested that as a result of the various measures already taken by the Petroleum Ministry to raise

Old and new prices of some petroleum products (Bombay)

	Unit	Pre-July 10, 1981 price Rs.	Post-July 10, 1981 price Rs.
Petrol	liter	5.56	6.15
Kerosene	kilolitre	1,408.43	1,558.43
High speed diseel oil	litre	2.61	2.96
Furnace oil	kilolitre	2,317.91	2,564.66
Naphtha :			
Fertiliser	tonne	1,378.04	1,729.64
Petrochemicals	tonne	2,830.15	2,830.15

domestic production of oil and it would be possible to curtail the import bill for crude and petroleum products next year by about Rs 1,000 crores, cutting the imports from 16 million tonnes of oil and 6.5 million tonnes of products this year to 14 million tonnes of oil and about three million tonnes of oil products next year. These reports sound rather optimistic but that the Government is keen on the Oil and Natural Gas Commission and even Oil India (which is expected to wholly government owned in the near future) in stepping up their activities is very clear. The Sixth Plan document has itself conceded that while several measures have been initiated in the last few years to accelerate exploration for oil and gas there are still large areas — both offshore and on-shore — where the exploratory efforts need to be intensified and that as oil prices rise exploration of even relatively less promising areas becomes economic despite a higher discovery cost of oil. The Plan provides for Rs 2,874 crores for the exploration and productive activities of Oil and Natural Gas Commission and Oil India Ltd. But it is known that ONGC has submitted a plan for accelerated programme of its off-shore activities. ONGC sources have been tight-lipped on this programme since this has not yet been cleared by the Government. It could be that the hike in petroleum products prices is the first signal from the Government that this accelerated programme will be approved.

Newspaper reports have suggested that New Delhi had decided to raise by 300 per cent the prices of domestic crude oil to place at the disposal of the Oil and Natural Gas Commission and Oil India larger funds for exploration and production of oil. Indigenous crude oil, it is reported, will be paid a price of Rs 1,180 per tonne as against the price of Rs 324 per tonne for on-shore crude and Rs 458 per tonne for off-shore crude. This should enable the Government of India to do away with the large budgetary support that it had been giving to the Oil and Natural Gas Commission in particular. The ONGC in 1979-80 made no doubt a net profit after tax of Rs 55.23 crores but in the same year it had received Rs 106 crores as capital and loans from the Government and other agencies. The higher prices of petroleum products, it is expected, would fetch to the exchequer over Rs 1,050 crores in a full year and during the remaining period of the current financial year a sum of Rs 825 crores. To the extent the Government will not have to provide budgetary support to the ONGC and Oil India and its finances will improve, this can be regarded as an anti-inflationary measure though the immediate impact will be a rise in transport and industrial costs.

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DOCUMENT

Text of Prime Minister's statement

The following is the text of the statement made by the Prime Minister, Mrs Indira Gandhi, at her press conference in New Delhi on July 10, 1981:—

What people are most concerned about is the economy. We have given the greatest importance to tasks of economic development and raise the standards of our people especially the poor.

The principal elements of our economic strategy are the growth of agricultural production, rapid industrialisation and modernisation, progress in technology and the even spread of the benefits of development, taking the maximum care to preserve the environment.

We have taken a number of steps to solve long-term problems. We have finalised and launched the Sixth Five-year Plan. We have adjusted our industrial policy, placing maximum emphasis on production.

We are trying to ensure that agricultural development spreads throughout our country. We are promoting technological development, accelerating programmes of energy production and developing alternative sources of energy.

Short-run problems are often very critical and absorb much of energy. The most pressing problem today is that of inflation. The annual rate of inflation came down from as high as 21.4 per cent in 1979-80 to 15.4 per cent in 1980-81.

This decline in the rate of inflation has continued until now, and in the current financial year, up to June 20 this year the annual rate of inflation has come down by over 10 per cent compared to last year.

In 1980-81, we gave top priority to the improvement of infrastructure performance. As a result of the steps taken, three key sectors—power, coal and railways—showed distinct improvement from around the middle of 1980-81—a trend which has continued in the current year.

The generation of power in the second half of 1980-81 was 13 per cent higher over the corresponding period of the previous year. Coal production (including lignite) which had remained stagnant around 106 million tonnes since 1976-77, showed a remarkable improvement, exceeding 118 million tonnes. The movement of freight by the Railways also augmented significantly.

With these improvements in the infrastructure, and as a result of the deliberate thrust given to it, industrial production started picking up steadily. The index of industrial production increased by 2.1, 7.1 and 9.1 per cent respectively in the second, third and fourth quarters of 1980-81.

This rising trend of economic activity has continued. During the first quarter of the current financial year, power generation increased by 19.2 per cent, coal production by 6.2 per cent, steel production by 20 per cent, cement production by 20 per cent and the Railways goods traffic by 14 per cent over the corresponding quarter of the previous year.

The production of 29 major industries, for which figures are available, increased by 19.1 per cent during April-May 1981 over the same period a year ago.

We are trying to do all that is needed to bring the economy back on to its path of steady growth—a path which we have tried to build through three decades of development efforts and planning. We must tone up the management of the economy. We want to provide incentives to producers in agriculture and in industry.

At the same time we have to ensure that middle sections get essential commodities at reasonable prices. We are determined to control inflation and to keep a firm grip over the economy by building up our stocks of essential commodities and releasing them in a progressive manner whenever necessary to check prices and to meet priority demands.

With these objectives, the Government, over the last few weeks, has been engaged in working out certain measures. One such measure decided some time ago is the importing of wheat.

As you know, the production of foodgrains last year was a record 133 million tonnes. Although weather conditions were not as good as in the previous peak year of 1978-79, food production exceeded that year's figure by more than a million tonnes, and by about 22 per cent compared to 1979-80.

Wheat production during this rabi season has also been a record one—36 million tonnes. I have no doubt that, in terms of availability of foodgrains, our situation is very comfortable. The total stocks of foodgrains with the Government on July 1, 1981, was more than 13.7 million tonnes—which by any criterion, is quite good.

When there is availability it is the time to build up substantial stocks so that we do not have to take chances and are not at the mercy of traders and hoarders withdrawing supplies from the market. This decision was taken to avoid any sharp increase in foodgrains prices, and as an instrument of control of the economy. This wheat can be released as and when it is necessary to combat pressure on prices and the machinations of traders and hoarders.

In fact, similar steps are being taken with regard to other essential commodities. Oilseeds production last year was 25 per cent higher than the previous year. Still the prices tended to go up in several areas. We have decided to import 5 lakh tonnes of edible oils in the next four or five months.

It is same with sugar. Sugar production this year is 52 lakh tonnes compared to 38.59 lakh tonnes last year. We expect a much higher increase in sugar production in the coming season.

But to keep complete control over sugar prices, we are importing a substantial quantity which will arrive in the next few months. I want to assure the Indian people that all this is part of our total strategy of keeping control over prices and over economic management as a whole.

Every avenue is being pursued to cut Government expenditure and make its functioning more efficient. But the burden on Government has increased and is increasing in terms of the work-load and even more so financially. The augmented and urgent needs of defence have added considerably to this burden.

Our Five Year Plan for science and technology will take us further towards self-reliance. The second unit of the Rajasthan atomic power station is now in operation.

The Kalpakkam and Narora projects are in an advanced stage. Narora's import content is as low as 9 per cent. We have decided to locate our fifth atomic power plant in Gujarat at Kakarapara.

Now a few words about relations with our neighbours. Our Foreign Minister recently visited Pakistan and the Chinese Foreign Minister was here a few days ago. It is well known that it was I who took the first crucial and difficult initiatives for better relations with our immediate neighbours.

We believe in strengthening friendship with all so as to improve the climate for peace. I want the people of Pakistan to know that we wish them well and we want to live in peace with them. Our countries face similar economic problems and we should bend our energies towards development which can be possible only if there is tranquillity and mutual trust. That is the message I sent to President Zia.

We also concede that every nation should be able to defend itself. However, our entire country is deeply concerned that Pakistan is acquiring such sophisticated aircraft. The F-16 represents the induction into this region of a class of aircraft a generation ahead of anything operating with other airforces of the area.

The other plans are all of the late 1960 or early 1970 technology. The F-16 on the other hand is an advanced aircraft of late 1970 technology and operational capability.

In the offensive role it can go much further and can carry bigger bomb loads. The offensive strike capability of even one such aircraft is at least three times that of MIG-21. The PAF, even without the F-16, already has, and will continue to have for some years, a deep strike force three times the size of our own.

Thus the subcontinent is being willy-nilly pushed into an arms race increasing financial burden on our people at a time when our limited resources should have been entirely used for the needs of our people and to make up for lost time in technological and scientific progress.

We cannot pretend that the bilateral relations between China and India have been good. But we want to improve them and we have stretched out the hand of friendship. The issues between us are most difficult and emotional. But nothing can be solved without basic goodwill and effort.

The shocking assassination of President Zia-ur-Rehman shows the instability which many developing countries are facing. We in India are vigilant and shall take all necessary steps to safeguard our interests.

India cannot afford the emergence of parochial and sectarian groups or any slowing down of production. We must all stand united and disciplined, sharing the hardships so that should any external threat arises, we are able to face it with the collective determination of the entire nation.

CDS ordinance

Following is the text of The Compulsory Deposit Scheme (Income Tax Payers) Amendment Ordinance, 1981 promulgated by the President on July 11 :

Promulgated by the President in the thirty second year of the Republic of India.

An ordinance further to amend The Compulsory Deposit Scheme (Income Tax Payers) Act, 1974.

Whereas Parliament is not in session and the President is satisfied that circumstances exist which render it necessary for him to take immediate action :

Now, therefore, in exercise of the power conferred by clause (1) of article 123 of the Constitution, the President is pleased to promulgate the following ordinance :

Short title and commencement

1. (1) This ordinance may be called the Compulsory Deposit Scheme (Income Tax Payers) Amendment Ordinance, 1981.

2. (2) It shall come into force at once.

Amendment of Section 4, 38 of 1974

In section 4 of The Compulsory Deposit Scheme (Income Tax Payers) Act, 1974 (hereinafter referred to as principal act) in sub section (1)—

(A) In clause (ii), the 'and' occurring at the end shall be omitted,

(B) For clause (iii), the following clauses, shall be substituted, namely :—

"(iii) For the assessment year commencing on the 1st day of April, 1979, the assessment year commencing on the 1st day of April, 1980 and the assessment year commencing on the 1st day of April, 1981 at the rates specified in paragraph C of the schedule, and

(iv) For the assessment year commencing on the 1st day of April, 1982 and the assessment year commencing on the 1st day of April, 1983 at the rates specified in paragraph D of the schedule."

Amendment of the schedule

3. In the schedule to the Principal act

(A) before the provision, the following paragraph shall be inserted, namely :—

(i) Where the current income exceeds Rs 15,000 but does not exceed Rs 25,000—4.5 per cent of the current incomes.

(ii) Where the current income exceeds Rs 25,000 but does not exceed Rs 35,000—Rs 1,125 plus 11 per cent of the amount by which the current income exceed Rs 25,000;

(iii) Where the current income exceeds Rs 35,000 but does not exceed Rs 50,000—Rs 2,225 plus 12.5 per cent of the amount by which the current income exceeds Rs 35,000;

(iv) Where the current income exceeds Rs 50,000 but does not exceed Rs 70,000—Rs 4,100 plus 15 per cent of the amount by which the current income exceed Rs 50,000;

(v) Where the current income exceeds Rs 70,000—Rs 7,100 plus 18 per cent of the amount by which the current income exceed Rs 70,000;

(B) In the Proviso, in clause (B) after the word and letter 'paragraph' the words and letter 'or paragraph D', shall be inserted.

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Income Tax (Amendment) Ordinance, 1981

Following is the text of The Income-Tax (Amendment) Ordinance, 1981 promulgated by the President on July 11 :

The Income Tax (Amendment) Ordinance, 1981 promulgated by the President in the thirty-second year of the Republic of India.

An ordinance further to amend The Income Tax Act, 1961 and The Wealth Tax Act, 1957.

Whereas Parliament is not in session and the President is satisfied that circumstances exist which render it necessary for him to take immediate action.

Now, therefore, in exercise of the powers conferred by clause (1) of article 123 of the Constitution, the President is pleased to promulgate the following ordinance :—

Short title and commencement

1. (1) This ordinance may be called The Income-Tax (Amendment) Ordinance, 1981.

(2) It shall come into force at once.

Insertion of new chapter XXB

2. In the Income Tax Act, 1961 (hereinafter in this 43 of 1961 chapter referred to as the Principal Act), after chapter XXA, the following chapter shall be inserted, namely :—

'Chapter XXB

Mode of repayment of certain deposits

Requirement as to mode of repayment in certain cases to counteract evation of tax.

269T. No company (including a banking company) co-operative society or firm shall repay to any person any deposit made with it otherwise than by an account payee cheque or account payee bank draft where the amount of such deposit, or where the amount of such deposit is to be repaid together with any interest. The aggregate of the amount of such deposit and such interest, is ten thousand rupees or more.

Provided that where the repayment is by a banking company or co-operative bank, such repayment may also be made by crediting the amount of such deposit to the account (if any) with such a company or bank of the person to whom such deposit has to be repaid.

Explanation: For the purpose of this section.

(i) 'Banking Company' shall have the meaning assigned to it in clause (A) of the Explanation to sub section (8) of section 4 (A).

(ii) 'Deposit' means any deposit of money which is repayable after notice or repayable after a period.

Insertion of New section 276 E failure to comply with the provisions of section 269 T

3. After Section 276D of the principal act, the following section shall be inserted, namely :—"276E. If a person, without reasonable cause or execuse, fails to repay any deposit referred to in section 269T in accordance with the provisions of that section, he shall be punishable with imprisonment for a term which may extend to two years and shall also be liable to fine equal to the amount of such deposit."

Amendment of Section 278A

4. In Section 278A of the principal act, after the words, figures and letters "or section 276CC", the words figures and letter "Or section 276E" shall be inserted.

Amendment of Section 279

5. In section 279 of the principal Act, in sub-section (1), after the words, figures and letter "section 276D" the words, figures and letter "Section 276E", shall be inserted.

Remember
the date
for filing
YOUR TAX RETURN

Ordinarily 30th June is the last date for filing Income-tax and Wealth-tax returns. However, persons engaged in business or profession can file their returns before the expiry of four months from the end of the accounting year or 30th JUNE whichever is later. The information in the tax return should be correct & complete and no false claim should be made. Correct form of return should be used, viz :

Form No. 1 For Companies
Form No. 2 For persons engaged in Business or Profession.
Form No. 3 For assessees whose total income does not include income from Business or Profession.
Form No. 3 A For assessees (including companies) claiming exemption under section 11 of IT Act, 1961.

Return forms can be obtained free of charge from the Income-tax Officer or from the Public Relations Officer in the Office of the Commissioner of Income-tax. Income-tax Return Forms No. 2 and 3 are also available at selected Post Offices for 30 paise each.

Remember to fill up ITNS-224 as an Annexure to the Return. This facilitates expeditious disposal of rectification applications, appeal effects & grant of pending refunds etc.

Tax due on the self-assessment basis after taking credit for pre-paid taxes, should be deposited & counterfoils of advance-tax and self assessment tax paid along with receipts of LIP, CDS and certificates of tax deducted at source should be enclosed with the return.

timely submission of correct & complete return is the best security against tax worries

Director of Inspection
(Research, Statistics, Printing & Public Relations)
Income-tax Department
New Delhi-110001
davp 81/68

COVER STORY

Payments crisis in stock exchanges

By SURVEYOR

THE Financial Express, Bombay, regional equity index scaled new peak of 172.42 against the previous week index of 161.28, with sizable gain of 11.14 points over a period of one week only. Popular scrips such as TELCO, TISCO, Kinetic Engg, etc reached new high water mark of prices, and the share market was never better. However, the market took a sudden and steep downward turn within a few days only owing to a number of factors, more particularly because the share prices of a few sprips, and reached dizzy heights as a result of manouverings and over-trading in the forward market. But despite the heavy erosion of prices in the first week of July, the prices continue to be artificially high. There were too sharp variations in the prices of a number of scrips in too short a time, which fact was bound to create difficulties for the market. (Table I).

In May 81, the share market functioned only for 11 days, and remained closed for a number of days. But from 27th June onward, the share market has remained closed continuously (with the exception on 2nd July) ostensibly for the purpose of completing the settlements work. The closure of share market for so many days is itself an abnormal phenomenon. However, the crisis in the share market is much deeper than the eyes can see. It is said that though the share market has faced many a crisis in the past created by heavy slump in prices, it is facing the crisis created by steep rise in prices of scrips, for the first time. It is a new experience altogether for the share market.

There are rumours floating that some of the big brokers are likely to face payment difficulties owing to wide variations in the prices within the period of one settlement only. But the Bombay Stock Exchange authorities are at pains to explain, that there is no financial crisis in the share market, and no broker firm has defaulted in payments, since April last, when one Bombay broker defaulted in payment (to the estimated extent of about Rs 20 lakhs). They point out that the closure of the market has been necessitated because of the non-cooperation and go-slow policy of the staff of the brokers, which is pressing for better wages and working conditions, and a reasonable share in the prosperity of brokers resulting from tremendous increase in the volume of business.

Further, it is pointed out that the recent unprecedented spurt in the prices of some volatile scrips was the direct result of Tata group of companies' reported decision to go in for liberal bonus issue, and policy of generous distribution of dividend by a number of companies. (Colgate's latest announcement of dividend was 110 per cent). It is argued that the abnormal rise in the share business is on account of ever-increasing number of investors, who are keen to invest their surplus funds. But it would be observed that phenomenal rise in the prices was in the case of a few scrips only, which caught the fancy of speculators, and over-trading was mainly in the case of forward scrips. Therefore, it is obvious that the present crisis in the share market is on account of speculative activities only, which of late grew massively.

There are about 300 firms of share brokers in Bombay, and about 80 per cent of these brokers are reported to be doing forward trading to a considerable extent. It is said that about half a dozen big firms of brokers are indulging in reckless speculative business, and two or three of these firms are likely to face acute financial difficulties, if the settlement of the outstanding business is completed. It is also alleged by some persons that these big speculation-sharks are instigating the share-market staff union to adopt an agitation attitude, so that they may have an *alibi* for not submitting the returns about their outstanding business in time, as required by the stock exchange authorities.

It is important to note that the returns, which were due for 19th June and 3rd July settlements are still pending with most of the brokers, (5th June settlement is also reported to be pending in

Table I : Closing Prices of Selected Scrips Over a period of Six Months

(In Rupees)

Scrip	January 2	March 2	April 1	April 29	June 1	June 15	June 26	Max. Price in 1981
Century ..	661-50	703	705	766	742	747/50	784	811
A.C.C. ..	132	132	136	148/50	139	149	183	201
Tata Steel ..	130-25	135/50	143/25	183	183/50	220/50	298/50	317-50
Ashok Leyland	16-75	18/50	22/50	24	22/50	23	29	32-50
Tata Eng. ..	362	411	471	533	519	547	685(800)	835
Zenith Steel ..	3,625	38/50	42	45	43	50	58	63
Great Eastern Ship	44-25	45/35	55/35	52	52/50	52/25	64	641
Tata Chemical	40-50	112/50	47/75	46/50	47/25	58/50	72	75
Colgate ..	137-50	137	148/50	145	168	160	150	168
Tata Oil ..	68	76	78/50	81	85	90/50	118	121-50
Kijaj Auto ..	1,210	1,270	1,550	1,475	1,450	1,580	1,630	1,700
Banetic Eng.	70-50	94	106	101	102	114	156	162

N B.: Many of the events that took place in the second fortnight of June1981, were unprecedented in the history of stock markets in India. For example, TELCO had the distinction of sharp rise in it price by about Rs 300. (It was quoted at Rs 830 at its highest in the kerb deals on 26-6-81), within period intervening between two settlements only (to be exact within 10 days only), and its price rose by Rs 100 approximately. in the course of one single day. Similarly. TELCO also suffered the heaviest fall for any single day on the announcement of 2 : 5 bonus. for it fell short of the market's high expectations. This was sharpest ever rise in the prices of any scrip in India, it is said. Another share, Premier Automobile, which was selling for about Rs 50 not long ago, rose as a resut of allegedly inspired speculative support to Rs 298, in the course of a few months only, notwith standing the fact that the company has skipped over the dividend continuously for a number of years, and in 1979-80 alone, it suffered the net loss to the extent of Rs 34.75 per share.

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part). It is true that share-market is an integrated market, proper functioning of which depends on the cooperation of all the brokers. If even one firm is not in a position to submit the necessary returns on the settlement day, it will result in non-completion of the return by many other broker-firms. The stock exchange authorities certainly have the powers to penalise such broker-firms, as do not submit the returns in time. But it is pointed out that no action is possible, when almost the entire community of share-brokers is at fault.

In the second fortnight of April 1981 there were some positive indications of speculators getting increasing hold over the share market operations. Therefore, on 29th April, Bombay Stock Exchange authorities took certain drastic steps to curb the reckless speculation. The jobbing was totally banned in the scrips included in cleared list, and the brokers were not allowed to increase their commitments in these scrips, though they were allowed to square-up their outstanding transactions. Moreover, the squaring up in the scrips included in the list "A" was to be done at the prices not exceeding those prevailing on 29th April.

However, on 29th May the position was reviewed as, according to the stock exchange authorities, there was perceptible improvement in the market conditions, and it was decided to restore gradually the normal functioning in the list "A" scrips Jobbing was restored and restrictions regarding the maximum prices of the scrips were also withdrawn totally on May 29. But with regard to the selected 17 volatile scrips, each broker was allowed to have maximum business upto Rs 10 lakhs in a month, subject to the maximum business upto Rs 3 lakhs in any one of the 17 scrips.

It is alleged in some circles that these relaxations, were made under the pressure from big broker-firms, whose major interest was to revive their speculative business. It may be of interest to point out that the limits of the business by each broker were later on raised from Rs 10 lakhs to Rs 15 lakhs, in case of total maximum, and from Rs 3 lakhs to Rs 5 lakhs in any one of the 17 scrips. However, the brokers could very well exceed these limits on payment of additional 'deposit' to the stock exchange (a term used in place of 'margin', to avoid impression that forward trading was going on). The top brokers were reported to be quite willing to make additional deposits as and when necessitated by their excessive speculation business.

It may be recalled that forward trading in shares had been banned as early as in 1964. However, forward trading has been going on as merrily as before without any obstacle, on so-called 'cash basis' with provision to square up the accounts every fortnight. However, the speculators have all the facilities of carrying over their deals from one settlement to another after paying the difference between the initial buying or selling rates, and the notional offsetting selling or buying rates fixed at the time of the settlement. This is nothing short of regular forward trading.

It is well known that hundreds of jobbers have been carrying on their roaring business without having any stock in their hands, or any intention whatsoever to acquire the stock. What makes it worse is that sizeable speculative activities are going on outside the fold of regular stock exchange mechanism. There are private settlements between the operators themselves without any information whatsoever to the stock exchange. Even 'badla' payments are made privately. Kerb dealings among the speculators are a regular feature, which give the semblance of non-official ring for carrying on the forward transactions almost daily. Only after certain members were admonished for this flagrant violation of rules, the venue of this activity shifted from the lane by the side of old Bombay stock exchange building to a nearby street, more open and spacious !

It is said in some knowledgable circles, that some of the big broker-firms have become law unto themselves, and the stock exchange authorities are not in a position to discipline them. Rather, their influence is reported to be working in a subtle manner, while decisions are taken by the stock exchange authorities regarding any matter affecting their interests.

There are of course obvious reasons for hectic speculative activities in the share market. Funds are being diverted in substantial degree from other markets to the stock-market, which at present provides better chances to earn quick money. With the pumping in of huge funds, white or black, to the share market, the speculative activity is the natural outcome. There is too much surplus money chasing too small a floating stock of the scrips, having attractive capital appreciation prospects. The result is that the market prices of the popular scrips are boosted artificially, without any basis or logic. These days the 'yield' on capital investment in the shares has almost ceased to be a factor determining the market prices of the shares. The sole cor sideration at present seems to be th chance of earning quickly and substar tially through rise in prices, as a resul of superficial boom-conditions. This cer tainly is not a healthy phenomenon.

No doubt, with the increasing industrialisation, formation of more and mor companies, as well as increasing accumulation of surplus funds with certain classes of people, more and more people ar looking for attractively profitable avenue for investing their funds. The share market appears to be the inevitable choice While according to an estimate ther were only two million shareholders in th country in 1965, their number has rise to 3.5 million now. About half of th total amount of paid-up capital in non government public limited companies i owned by the individual shareholders while the joint stock companies, trusts and financial institutions etc having vas resources at their disposal, hold the othe half. Table II would give an idea abou the growth pattern of the listed stock i India.

It will be seen from the table tha while the number of non-government public limited companies went down from 10,129 in 1946 to 8,900 in 1979, thei paid up capital went up from Rs 30 crores to Rs 3.120 crores. Moreover, i the same period, the number of liste companies with eight stock exchanges i India almost doubled up, and the tota paid up capital of the listed companie at Rs 2,970 crores was 95 per cent of th total paid up capital of the non-government public limited companies in 1979 Thus there was 1,000 per cent increas over 1946 in the paid up capital of th listed companies, which explains hecti increase in the volume of share-business The number of the listed companies i going up by about 100 per year, an with the passage of time their number i bound to go up at much faster rate.

Similarly, the amount of new issue has also been increasing year after year While in 1961-62 to 1970-71 the averag annual capital issued was to the tune o Rs 47.4 crores, it rose to Rs 71.6 crore in the decade 1971-72 to 1980-81. Th capital issues during 1980-81 itself wer to the tune of Rs 94.2 crores, and th same are expected to touch a record o Rs 250 crores during 1981-82. The public issue of equity capital by the FER companies, consequent upon their Indianisation, played a very significant role in attracting a large number of new investors, and giving large philip to the capital market.

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Table II: Growth pattern of listed stock

As at 31st December	1946	1961	1979@	increase in 1979 Over 1946	increase in 1979 Over 1961
No. of Non-Government Public Ltd. Companies	10,129	6,702	8,900	— 12	33
No. of Listed Companies	1,125	1,203	2,133*	90	77
Listed Companies as % of Non-Government Public Ltd. Companies	11	18	24		
Paid-up Capital of Non-Government Public Ltd. Companies (Rs crores)	306	946	3,120	919	229
Paid-up Capital of Listed Companies (Rs crores)	270	675	2,970	1,000	340
Paid-up Capital of Listed Companies as % of Paid-up Capital of Non-Government Public Ltd. Companies	88	71	95		

@ Figures of number and paid-up capital of joint stock companies are estimated.
* (a) The number of listed companies at present may be approximately 2,300.
b) Out of this number, the maximum number of companies i.e. 935 were listed at Bombay Stock Exchange. This number has risen to about 1,300 now.

Nevertheless, with the increase in the number and quantum of new issues, investing public is responding very enthusiastically to these issues. During 1980, out of 163 equity offers to the public, 131 were over-subscribed. Out of these 131 over subscribed issues, 115 were over-subscribed up to 5 times, 8 issues from 5.1 to 10 times, 6 issues from 10.1 to 20 times, and 2 issues more than 20 times. This record has been surpassed further during first half of 1981, when one public issue was oversubscribed 72 times. During this very period the largest over public issue of Gujarat Narmada Valley Fertiliser Company for Rs 23.6 crores is reported to have been over-subscribed three times. According to one estimate, about Rs 275 crores of public are locked up in the new issues at present. All these facts go to prove amply that there are huge surplus funds with the public seeking suitable investment, and the number of investors is increasing at a very high rate every year. It would not be surprising, if a sizable number of persons having substantial surplus funds are tempted to become richer quickly through indulging in reckless speculative business also.

The present crisis in the share market, which is likely to take turn for the worse as a result of feared default by a few brokers, has naturally prompted all concerned to ponder as to how the repetition of a similar situation can be avoided in future at least. Some people including a few investment brokers suggest that the forward trading in the shares should be abolished in all its forms. It is learnt that in fact there was a suggestion by Bombay Stock Exchange authorities in a meeting with brokers on July 6 that all the scrips in list "A" (cleared list) should be transferred to the list "B" (cash list). The net effect of implementing this suggestion would be that all the dealings in shares will strictly be on spot delivery basis, and there will be practically no scope for any speculative business. It is reported that the idea of abolishing list "A" completely was supported by an overwhelming majority of the brokers participating in the meeting. However, it is feared that ultimately this suggestion may not be approved by the Board of Directors of Bombay Stock Exchange, under the pressure of the top brokers, whose main interest is in speculation. It may be recalled in this context that scrips like IOC, Bajaj Auto and Century Enka etc have already been transferred by the Bombay Stock Exchange from list "A" to list "B". On the same analogy there should not be any objection to transfer, all other scrips (or at least the volatile ones) from list "A" to list "B" in order to stop unhealthy speculation, and create an atmosphere of confidence amongst the investing public.

It is argued that forward trading even in a limited degree, goes a long way to ensure the liquidity of the shares, which is their main attribute. It is generally agreed that the abolition of the cleared list, will no doubt reduce the liquidity of shares. Yet the investment brokers contend that this step will not affect the genuine investment activity to an undesirable extent. The recent statement of Union Minister for Finance, Mr R. Venkataraman at Ahmedabad on July 2, 1981, made it quite clear that the Government was well aware of the speculative activities in the stock markets. Is it not then the duty of the Government to find out as to how speculation in shares in still going on, when forward trading in shares has since long been banned legally? Further, should the Government not take effective steps to enforce the ban in a meaningful manner, if some desperate speculators are bent upon circumscribing the law? It is feared that the refusal of Union Finance Minister to intervene in the present financial crisis as the result of reckless speculation in the stock markets, may embolden the speculators to indulge further in their undesirable activities.

However, even if for some compelling reasons, it is found necessary that the society should learn to live with forward trading activities in the stock market, it is high time that certain measures are taken by the Government as well as the stock exchanges to bring the forward trading under strict, really effective, and meaningful control. Probably the least which must be done in this regard is to introduce the practice of 'margin trading', under which every operator buying or selling the cleared scrips would be under legal obligation to deposit certain margin money with the brokers, say 20 to 25 per cent of the market value, to cover the variations in prices. The brokers also should deposit the corresponding amount with the stock exchanges. In fact, the 'margin trading' is already in vogue in USA and some western countries. This system would compel the operators to limit their operations according to their means, curb their tendency to gamble, and desist them from manipulating the market.

The stock exchanges will also have to be more vigilant and strict than at present, in getting their instructions carried out by the broker community. At present the functioning of the stock exchanges in India is regulated under the Security Contract Regulation Act 1956. It authorises the Union Government to issue guidelines to the stock exchanges and control their functioning, particularly through its nominees on the board of directors of the stock exchanges. It is said that generally the government nominees on the board of directors of the stock exchanges have neither the necessary professional knowledge of the technicalities of the share market, nor they have any inclination to learn them, for their continuance on the boards of directors is rather an uncertain factor. On the other hand the powerful brokers see to it that the boards of directors of the stock exchanges do not take such decisions as are likely to affect their interests adversely. It would be worthwhile to have a second look on the relevant law, and make it incumbent on the part of the

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boards of directors of stock exchanges to enforce the required discipline among the share brokers, and make them resfect fully the rules and regulations made by the stock exchanges. Complete computerisation of the work in stock exchanges may also help a great deal in this respect. However, strengthening of the staff of all the stock exchanges with a view to keep pace with ever-expanding volume of business would also be necessary. The Bombay Stock Exchange is having the same strength of staff, which it had two decades before, despite manifold increase in the business. Naturally, it has resulted in the excess load of work on staff, which in turn is resulting in discontentment. Similarly, the stock exchange authorities should also ensure that the staff of the broker-firms is also given a better deal, and it is enabled to have its legitimate share in the profits of the broker-firms.

It will be relevant to observe here that the membership of the stock exchanges in India is highly restrictive and there is practically no scope for increasing the number of their members, entitled to carry on broker-business to cope up with speedy expansion of the share-trading activities. On Bombay Stock Exchange, for example, there are about 450 active members working in about 325 broker-firms. The number of members and broker-firms has not increased much during last three decades despite the fact that the stock exchange business has multiplied many many times. It would be worthwhile to consider as to how the number of broker-firms can be increased to deal conveniently with the new share-business. Further, in a place like Bombay it is extremely difficult for the broker-firms to secure additional space to facilitate the employment of more staff to look after the new business. These limitations are bound to result in delay in attending to the required paper work. However, if the procedure and the paper work required for transfer of shares and other similar matters is simplified significantly, and reduced to the minimum, much more work can be attended to by the existing staff only. Activities on share markets in the western countries have reached phenomenal heights, and in order to keep pace with the changing times the stock exchanges there, have modernised their functioning. There is only four-day delivery period in most of the western countries instead of 15 days in India. With huge expansion of share market in India, can we not adopt similar practice in this country, as well ? The reduction in delivery period will certainly curb the speculative business as well.

The present crisis in the share markets, particularly at Bombay, which is the biggest and most popular, must serve as an eye opener to the Government and the stock exchanges. The top priority would have to be given to get the pending settlement work completed and payment position sorted out. No doubt there is lurking danger that as a result of completing the settlement work, some payment difficulties may arise for a few firms (already two brokers of Ahmedabad are reported to have defaulted, and the amount involved is estimated at about Rs 25 lakhs). However, the inevitable has got to be faced. Quicker the better. It is high time the Bombay Stock Exchange authorities take up the task more seriously and expeditiously in the overall interest of maintaining a healthy investment climate. It must take firm and effective steps to resolve the present crisis without waivering any further.

Fresh guidelines for stock exchanges?

From OUR SPECIAL CORRESPONDENT

BOMBAY

ALL is not well with the functioning of Dalal Street, the premier stock exchange in the country, for quite some time. Whatever happens on the Bombay Stock Exchange normally has its repercussions on other stock exchanges in the country.

The stock exchange has been downing its shutters quite often. This step has been taken by the stock exchange authorities mainly because of non-completion of the settlement work in time. Currently, work with regard to two previous settlements is to be completed. Inquiries from stock exchange circles indicate that this is being deliberately avoided by a few interested parties who are stated to be facing payment difficulties.

No doubt the stock exchange authorities are trying their best to sort out the difficulties. But their actions have their own limitations. With rampant speculation that has become the order of the day on Dalal Street in the current sustained bull phase, such situation is bound to arise.

Some large speculators are stated to be encouraging the Share Bazar Staff Union to continue their agitation by putting forward some new demands at this time. These speculators seem to be bidding for time to settle their deals on the stock exchange.

In the past two and a half months, the Bombay Stock Exchange has functioned normally for only a few days. On May 2, the stock exchange authorities enforced several restrictions on trading with the intention of limiting the activity. Three weeks and two settlements after they were rolled up, the authorities downed shutters once again towards the end of June. This had become necessary because the settlement work had not been completed properly. The decision by the authorities to remove restrictions on trading in all scrips other than 17 cleared scrips helped the speculators to go ahead with their plans. Moreover, at the turn of the settlement on June 5 the authorities failed to use their last weapon of fixing clearing rates with a difference from the ruling rates for both bulls and bears. Moreover, the aggregate value limit for fresh sales and purchases in cleared shares was doubled to Rs 20 lakhs and the scripwise restraint was raised from Rs 3 lakhs to Rs 5 lakhs.

Removal of restrictions one by one naturally led to the exposure of the market to wild spree of speculative activity. This in turn led to accumulation of huge payments in the two settlements which were concluded on June 19 and July 3. Although the market was open officially for one day on July 2, in kerb deals speculators were playing havoc. For example, Tata Locomotive were lifted in kerb deals from the official closing of Rs 734 on June 26 to a new high of Rs 860 after the company notified to the stock exchange that the board would consider the question of issue of bonus shares along with accounts for 1980-81 and declaration of dividend for the year. However, in the official trading on July 2, the shares were marked down to a low of Rs 685 since the maintenance of equity dividend at 20 per cent and the announcement of a bonus issue in the ratio of two for five fell far short of the general expectations in the share market circles. Other pivotal counters also showed wide fluctuations during the period, although the range varied from counter to counter.

Inquiries with marketmen indicate that these wide fluctuations have led to payment crisis on the stock exchange. A few big operators who have lost in one settlement and gained in another have been insisting that the work with regard to both these settlements should be settled together. Since many others may not be willing to accede to their request, they are stated to have encouraged the Share Bazar Staff Union to raise their fresh demands at this time. Payment difficulties and failure of even a few big parties to honour their full commitments have wide ramifications not confined only to a few speculators but also from the viewpoint of the smooth functioning of the market. Normally, the share brokers try to get over such crisis in the market, but some innocent brokers have to suffer heavily for no fault of theirs. Small investors also suffer in the bargain. These who have paid for the shares they have bought do not get delivery of their shares and those who have sold their shares are not able to realise their monies in view of the non-completion of the settlement work in time. Unless pay-in and pay-out in any particular settlement is completed, share brokers are unable to settle the transactions entered into with their clients. Some investor brokers who have deals with upcountry share brokers or sub-brokers are put to lot of difficulties. They have to honour hundies of such upcountry brokers, while they are unable to draw hundies on the upcountry brokers in the absence of non-completion of deliveries through the stock exchange clearing house.

Accumulation of large payments by a few parties have naturally raised doubts whether it would be paid up by the concerned members, particularly since there have been very wide fluctuations in several leading counters like Tata Steel, Tata Locomotive, Century, Baroda Rayon, Scindia and Great Eastern Shipping, in the kerb deals. Rumours are frequently current in the market and some parties are unable to honour their commitments and might turn defaulters. In the event of a few big operators failing to honour their commitments, the market's liquidity will be hampered greatly.

Frequent reports that the Union Government is considering a package of anti-inflationary measures including restraints on dividends has also dampened the market sentiment of late. In view of this, the trend on other stock exchanges has also been distinctly weak. This in turn has led to some payment difficulties by a few brokers on Ahmedabad and Calcutta Stock Exchanges in the recent past. Thus operators on the Bombay Stock Exchange have not been able to divert their attention to other markets.

It cannot be gainsaid that the weapons with the stock exchange authorities to deal with such extra-ordinary situations are not enough. Wide fluctuations and the big volume of business have been possible only because the reckless speculators have the facilities for carrying over their deals from one settlement to another by paying budla or contango charges. Since the regulations with regard to payment of margins are not enforced strictly — and this is not possible for the stock exchange authorities since a large volume of deals by these big operators are settled outside the market and then brought into the books of stock exchange at a convenient time to them — and since the stock exchange authorities are unable to fix clearing prices which will penalise both the bulls and bears as the case may be, the stock exchange becomes vulnerable to the rampant speculative activity by a few interested parties. No doubt, these big operators are able to go ahead with their plans only because they have a following of large number of small investors. In view of the large investible funds being diverted to the stock exchange in the current sustained bull phase and in view of the entry of a large number of new investors in the market who have benefitted from the current bull phase, big operators are able to lift shares with little support disproportionately to their intrinsic value or push down some shares by pressing sales to their advantage. The current deals on the stock exchange are nothing short of forward trading, which is officially banned.

The stock exchange authorities are trying their best to complete the pending work of the previous settlements and complete the payments with regard to these pending settlements. However, their efforts have been hampered by the agitation by the Share Bazar Staff Union, which has refused to oblige unless their demands are settled. The stock exchange authorities are, therefore, trying to attack the situation on both these fronts. How far they succeed remains to be seen.

However, the process of completion of work in respect of previous settlements has to be gone through, however, painful it might turn out to be. Unless unwound, excess is bound to seep through and disturb the health of the market. The excessive activity noticed in the recent settlements will have to be scaled down compulsorily over a given set of settlements. As custodians of the country's leading stock exchange, the authorities of the Bombay Stock Exchange have added responsibility. They owe a sense of obligation not only to their own members but also to the stock market fraternity all over the country. Bombay's ramifications are not restricted to itself. They are bound to spread to other stock exchanges also, as had happened in the past.

Reports are that the Government is evolving fresh guidelines for stock exchanges to check irregularities in their operations. This would indicate that the authorities have realised that it not possible to effectively control the working of the stock exchanges with the existing regulations. This could be because of the shortage of staff.

The Government is reported to be thinking of tightening the present system of benami share transfers. How far it succeeds in this respect would be watched with interest in concerned quarters. The Government also wants that the stock exchanges computerise their operations progressively. It is also stated to be considering proposals for fixing a minimum scale of brokerage as a further curb on speculation. However, enforcement of such a measure may have its own limitations. Some regulations for companies with regard to closure of books and the subsequent work related there to or notification to the stock exchanges about bonus issues are also stated to be in the pipeline.

COVER STORY

Bouts of speculative fever

From OUR SPECIAL CORRESPONDENT

CALCUTTA

ALTHOUGH it lacks the drama, excitement and the turbulence of the Bombay Stock Exchange, Calcutta has had its own bouts of speculative fever. Right now what could be just speculation about certain companies' prospects, mostly belonging to the Birla group, has taken their prices well past the best in the previous year. For example, Hindustan Motors rose to Rs 31.70 on July 3 against the previous year's peak of only Rs 12.34; the price of that of India Steamship moved up to Rs 21.55 from only the 80's peak of Rs 12.70; Jayshree Tea went up to Rs 44.75 from Rs 39.85; Kesoram Industries to Rs 46.20 from Rs 43.20; Texmaco to Rs 76 from Rs 60.80; Universal Cables to Rs 60.50 from Rs 45; Zuari Agro-Chemicals to Rs 30.75 from Rs 20.60; Orient Paper to Rs 51 from Rs 44 and Gwalior Rayon to Rs 69 from Rs 51.

The real causes of speculation are not known in each case. But in some cases such as Hindustan Motors and India Steamship expansion and takeover news has been attracting market interest. Hindustan Motors, it appears, has sought the permission of the Central Government to set up a plant in Gujarat with facilities to assemble 7,500 commercial vehicles annually in order to make fuller utilisation of production facilities available at its West Bengal plant in Uttarpara. In its existing Uttarpara factory the company produced only 4,880 commercial vehicles as against an installed capacity of 15,000 vehicles.

Expansion apart, the company has plans to improve the design and technology of passenger cars in collaboration with Vaxhauls of U.K. and also plans to produce Bedford trucks of a payload capacity of ten to 15 tonnes in collaboration with the American General Motors. Hence the share market views the prospects with a rose tinted glass and to cap it all the company's net profit for the latest working year has reportedly improved to Rs 5 crores.

India Steamship share's attractions for the stock market are probably based on the fact that it has acquired or is about to acquire a 39 per cent stake in Nilhat Shipping, a subsidiary of the tea broking firm of J. Thomas & Co. Nilhat Shipping has been a sick company, of course, but under India Steamship's management, its assets can be utilised better, helping eventually India Steamship to improve earnings or so the market thinks.

In the hand delivery section (the section which consists of some 50 soundly managed companies to which the Birla companies mentioned above also belong), the other companies whose shares have been in the limelight in recent weeks are Escorts, Brook Bond, Calcutta Electric, General Electric, Guest Keen Williams, Indian Oxygen, J. K. Synthetics, Straw Products, Shaw Wallace, Shree Synthetics and Usha Martin Black. These are companies reputed for good management and sound financial practice and the rise in their shares is to be attributed to general investor preference for relatively less risky equity in an inflationary economy such as ours is today.

The stock market has also frowned on those which have fallen on evil days like, for instance, Bata India. This company's scrip quotes around Rs 17 which is lower than the lowest quotation of the past year. Another company whose prospects are not fancied is Lipton India whose quotation is now pretty close to the lowest of 1980. Alkali Chemical of the ICI Group (renamed Crescent Dyes) is also quoting below the previous year's lowest market price. This company is passing through difficult days due to raw materials shortage which has forced it to close its Rishra Chemical Factory at present. There is also Birla company, Birla Jute, which has been badly marked down its quotation, falling close to the 1980's low of Rs 28.75. This company's jute business is mainly responsible for a sizable loss in earnings and, like most jute companies, Birla Jute too has been facing rough weather.

This factual description should show that while some shares such as Hindustan Motors, India Steamship and Gwalior Rayon have been enjoying a fair measure of speculative support, the rest are being assessed pretty fairly and there is no overtrading in Calcutta stock market at present. Rather the transactions give the impression that the proceedings are fairly smooth. So one does not visualise a crash or crisis in the near future barring those sections where speculators are at work. But, of course, if the Government takes it to its head that it must freeze dividends or some other drastic measures against the corporate sector then that may well precipitate a crisis. The tight credit policy has not really hurt the stock exchanges, not at any rate Calcutta yet.

Panic in market

From OUR CORRESPONDENT

AHMEDABAD

NEVER in the history of the stock exchange one has heard that a payment crisis developed when the share prices were booming by leaps and bounds. But it so happened in Ahmedabad recently. Two parties have been declared defaulters by the authorities of the Ahmedabad Stock Exchange as they failed to honour their commitments. One party, according to market reports, failed to pay up its commitment to the tune of Rs 20 lakhs while the other one only Rs 1.5 to Rs 2 lakhs.

However, this created panic in the market for few days as barely few brokers have been able to escape from the financial burden due to failure of these parties. About three member brokers have lost about Rs 10 lakhs as the 'big' defaulter did not agree to pay anything.

What is more surprising is that the defaulting party has more outstanding sales in few cash scrips and outstanding purchases in Gujarat Narmada Valley on premium basis. He has also big short sales in shares of Tata Steel which flared up from Rs 100 to Rs 325 within a span of four months.

The failure of these parties in honouring their commitments may be attributed to the negligence on the part of the stock excaange authorities to some extent also as they did not take any drastic action to take deposits or special margins from bears.

Meanwhile, it is also much more surprising that when the pivotal scrips in Bombay were moving up very fast, scrips like Calico, Ambica and Atul dropped sharply in last one year. The management of these companies must find out the reasons for it in the interest of the shareholders and public at large.

COVER STORY

Phenomenal rise in prices

From OUR SPECIAL CORRESPONDENT

MADRAS

THE Madras stock market is essentially an investment market with little speculation. Investors seem to pause now and again to see if there is anything better in which to plank their precious resources but find that there are not many stores of value of comparable intrinsic merit to choose from, and therefore just ask for good scrips to add to their portfolio of holdings.

Throughout the last one year there was an unprecedented investor interest on a broad front in all sections of securities. The flow of investible funds in corporate securities has been significantly abundant. Consequently, the volume and frequency of trading in securities increased considerably and there has been a large scale influx of new investors into the market leading to a phenomenal rise in the price of securities. This unprecedented volume of trading in securities did however bring in its train some problems in regard to performance of contracts in time.

The general investment climate for new issues has also improved considerably, during the year. From September 1980 onwards investments in new shares slowly emerged out of the earlier sluggishness with encouraging signs of a distinct pick up in support of new issues. Reflecting a sense of investor's confidence the primary market for new shares had been remarkably brisk from January to June this year. During this period the equity issues by existing companies for additional capital and by new companies for fresh capital were oversubscribed by the public.

This enthusiasm in new issue market may be ascribed to the fact that a majority of shares in the secondary market had reached dizzy heights with diminishing returns and possibility of growth restricted. Secured debentures and convertible bonds have been a novel feature of the primary issue market.

Enquiries show that, by and large, the Madras stock market is currently active with stock brokers having a good turnover. Scrips that are favoured mostly relate to the engineering industry, transport undertakings, textiles and chemicals. These command very good premia in the market and attract good investment. The investment climate in general and on stock market in particular is quite favourable.

The reasons for the growing popularity of the share market in Madras, the one-time Cinderella among cities, are not far to seek. The leftist domination of Kerala economy and the consequent feeling of insecurity have led to disinvestment of even inherited property interests by many Keralites who have of late chosen to settle in Madras.

With agricultural holdings in Tamil Nadu coming under the Land Ceiling Act and with minimum wages being fixed for farm labour without fixing either minimum working hours or output, landholders have stopped further investment on landed property and further application of capital to land they are already holding. These landed gentry migrate to nearby towns and cities and turn to money lending as a business. Of late, however, they have begun to feel that part of their money should go into hedges although the return they bring may compare unfavourably with income from usury.

Besides these internal capital realisations, the inward remittances of those gainfully employed abroad especially in the Gulf countries have also contributed to the pressure on the none-too fast expanding basket of equities with the result that the demand for equities of even middling performers among public companies has been well sustained. This in the main explains why the stock market is robust despite constraints such as coal scarcity and power cuts.

As one prominent stock broker described the local stock market, values are breaking out of the cocoon of traditional concepts and with blue chips companies offering 15 per cent interest, payable quarterly, on fixed deposits, "it is not a surprise that the man who talks about yields on equity is listened to with the same mild interest as the Sunday sermon of a second rate pastor". "All speedy share price appreciations tend to promote a short term outlook and what people are really interested in is what is likely to happen next Monday rather than the probabilities of 1982."

Mr S. Narayanaswamy, partner, Chitra and Company a firm of stock brokers, summed up the current position as follows: "Trading in the stock market is of a mixed pattern and overall business is moderate. Government securities ruled steady. Engineering shares found good support while textiles and plantings ruled dull. Select miscellaneous scrips met with keen demand."

Though the Madras Stock Exchange was established in 1920 within three years membership had depleted. The share brokers continued their business depending mostly on Bombay, Ahmedabad and Calcutta shares. In course of time they felt the need for an organisation to regulate their functions through rules and regulations and the Madras Stock Exchange Association was formed in 1937 and was converted into a company limited by guarantee in April 1957. Currently the stock exchange has a membership of 46. Four hundred companies are listed on the exchange. The number of securities listed as on April 30, 1981 comprise 127 government securities, 418 equity shares, 185 preference shares, 135 bond issues and 38 debentures. The aggregate paid up capital of listed securities excluding government securities is about Rs 1,958 crores.

The stock exchange provides opportunities to individuals to invest their surplus funds while, at the same time, providing a ready marketability for stocks and shares listed in the exchange.

A spokesmen of the Madras Stock Exchange stated that the main diversion of funds to the stock market was due to *FERA* issues which have motivated many individuals to invest in shares to earn surplus profits. *FERA* shares command a fantastic premium and dividend declared on them was also higher than that by other companies. The second reason is the interest rate on bank deposits is comparatively lower than dividends on shares. Same is the case with fixed deposits' interest rate pegged at 15 per cent. Further, investment in shares has always a capital appreciation and dividends upto Rs 3,000 per annum are exempted from income tax. Exemption from wealth tax has also been granted for dividend for income upto Rs 1.5 lakhs. Again those who invest in public issues of new companies are also eligible for certain concessions under the Income-tax Act. These concessions as well as the appreciation of share values have boosted the stock market operations to considerable heights. From a meagre 97 scrips listed in 1937 the Madras Stock Exchange now has on its list 903 scrips.

COVER STORY

Restricted trading

From **OUR SPECIAL CORRESPONDENT**

BANGALORE

ONE of the younger ones in the national chain and very zealous of its professional commitment and reputation, the Bangalore Stock Exchange does not seem to be disposed to be sucked into the crisis the senior brother institutions elsewhere are apparently heading to.

Rightly taking a leaf from the experience of the other major stock exchanges, wherein situation had been going haywire, the Bangalore Stock Exchange has opted for precautionary measures in the interest of avoiding and undermining of investor's confidence in it. Its managing council has just taken a decision to restrict trading activities on market to only three days in week, *viz.* Monday, Wednesday, and Thursdays with effect from July 1, 1981. The other two days, *viz.* Tuesday and Fridays have been earmarked for delivery and payments as well as for settlement of transactions which might be outstanding for sometime.

It is explained that this decision was taken in view of heavy transactions taking place currently with market being very active and volume of trading put through by members being sizeable. It had been felt that members were not finding enough time to take delivery of documents and arrange payments since all the while fresh business was taking place leading to piling up of arrears of work. Members have been advised not to trade on those two days of respite but to devote themselves to settling transactions already entered into.

The managing council would review the situation from time to time and would announce resumption of normal trading pattern as soon as outstanding position was brought down considerably.

The Bangalore Stock Exchange is essentially an investment market and a cross section of investors comprise retired government servants, private and public sector employees, small businessmen and people in various professions. With the advent of a few operators, market activities are being transformed and market activity is being enlivened.

Speculative activities, it is pointed out, are also straightened by enlistment of shares in Bangalore official quotations of companies like Telco, Reliance, Larsen & Toubro, Gwalior Rayon, etc, enjoying all India following. Stock exchange authorities had also permitted trading in securities listed on other stock exchanges by members during official trading hours thus adding impetus to very brisk and voluminous transaction floor.

The Bangalore Stock Exchange has taken credit for several innovations in propagating investment philosophy among people and spreading the equity cult to support national economic and development activity from time to time. It holds sessions on balance sheet study and dialogue between exchange and investors. It took the lead in bringing stock exchanges and investors in the southern region on a common platform for concrete action.

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SPECIAL ARTICLE

Is racial violence in the UK unavoidable?

By HARINDRA DAVE

ON June 9, 1981, Yorkshire television network arranged a debate on race relations and it was televised throughout the United Kingdom. One of the participants was a Conservative M. P. Nicholas Winterton. He echoed the sentiments of Enoch Powell by favouring the voluntary repatriation of non-white population. He was of the opinion that 50,000 blacks may be returned to the land of their ethnic origin or birth and Government may pay them some £ 5,000 each. An Asian young man from among the audience got up and smartly cornered Mr Winterton with a query as to how in the present economic crisis, Mrs Thatcher would fetch such a large amount of money? Is she going to sell British Leylands to Japan or British Steel to Germany ? Instead why not repatriate a few hundred Australians like Mr Winterton who are creating all sorts of trouble for racial minorities ?

Again when Mr Winterton remarked that 'your children and my children will have equal opportunities' in the United Kingdom, a Gujarati girl from Leeds stood up and pointedly asked Mr Winterton : "Are you going to stand the humiliation of giving the blood test to prove that your children are your own ? Well, we blacks are supposed to do that." These two dialogues in a revealing and exciting debate, indicate certain basic trends in racial relations in the United Kingdom. At the outset, we are impressed by the strength of democracy in which an unknown Asian youth or a Gujarati girl can challenge a powerful ruling party MP in public. But it also uncovers the deep-rooted suspicions among the minority community which has settled in the United Kingdom since decades. It is one thing when Mrs Thatcher or Mr Winterton say that they will have an equal opportunity but when we put it to practical application it results into inequality which climaxes from the equal treatment to unequals. One remembers the criticism of Anatole France : "The law in its majestic equality forbids the rich as well as the poor to sleep under bridges, to beg in the streets and to steal bread." It is almost a similar situation when national leaders in the United Kingdom talk of equal treatment. Because when whites approach schools for admission of their children, they are not supposed to prove that they belong to the country. But when a black, who came to this country decades earlier, approaches a school for admission of his children, he has to produce his passport to prove that he is a citizen of the United Kingdom and also he has to submit the proof that he is the father of the child.

The situation we confront in the United Kingdom is to be examined from two angles. It is not that all whites hate black and all blacks hate whites. If you move across the streets of London when offices start functioning or in the evening when people go home, you will find a white girl and a black boy walking hand in hand, chatting with bewitching smiles about the day's work. In restaurants, in university campuses and in factories you find blacks and whites merging with each other without any complex in their mind. But politicians like Enoch Powell started talking about the black invasion which according to him, may ultimately result into white people receding into a minority. This gave a misleading shock to the white population of that country. The media there is perhaps the best in the world as far as qualitative standards are concerned. But being controlled by people with conservative persuasion they tend to fan the fire of racism and aggravate the situation by distorted reporting. Some time ago the *Daily Telegraph* reported with a headline "Bradford 'lives on immigration time-bomb' " and went on to say that local community leaders are living on a time-bomb. *Daily Mirror* reported with big headlines that one in two school children will be coloured. In fact the figure showed that it may be only one in 3.35. This type of misreporting also intensifies racial feelings and gives shape to non-existent fears in the white and grave suspicions in black population. One district paper *Telegraph and Argus's* Asian editor, John Salmon who, incidentally, speaks good Hindi and better Gujarati with Parsi accents reported in his newspaper:

"Why is it that "time-bombs"—however fictitious—and "clashes"—however exaggerated—involving Asians and West Indians make "news" while other more constructive activities do not?

"Why is it that some white people regard Asians and West Indians as "a threat" or a "time-bomb" rather than as people or as next-door neighbours? Is it because that is the way they are treated in a lot of the media?

"And is it not possible that, by distorting, exaggerating and inventing problems, the sections of the media actually could be increasing likelihood of real "clashes" or "explosions", which they would then, doubtless, piously denounce?"

It is not only extremists like Enoch Powell who encourage such hatred towards black people. For the first time in British parliamentary elections Mrs Thatcher used this weapon of racial hatred to win popular white support. In 1978 in a television interview she said: "British people are afraid of being swamped by people with a different culture; and drastic cuts in immigration were necessary to keep fundamental British characteristics". This was just a starting point. It emboldened extremist institutions like National Front to propagate the creed of violence against the black.

When we think of the recent incidents of racial clashes in Liverpool, Manchester and other places in the UK, we must look back to come to the inescapable conclusion that these incidents are the culmination of the hatred, systematically spread by white Conservative leaders and supported by some of their Labour and Liberal colleagues in the Westminister. In 1976 Southhall was rocked by the worst ever racial riots. Southhall is an interesting London suburb with the greatest concentration of Punjabi sikhs anywhere in the world, perhaps including cities like Ludhiana, Amritsar and Chandigarh. Since then, such incidents have increased and now the frequency also is more and the nature of the incidents has also been more serious. Right from the incident in January 1976, when an 18-year old student Gurjit Singh Chagger was stabbed and four white boys were taken into custody for the incident, the behaviour of the police has remained strange and not beyond suspicion. At that time they categorically rejected that Singh was a victim of racial prejudices. Today also they defend the display of strength in Brixton in last April which resulted into bloodshed and violence and the recent incidents in which police has, for the first time, used teargas have been aggravating the law and order situation.

Mr Dave, editor of the Gujarati daily 'Janmabhoomi', recently visited the United Kingdom.

We read conflicting reports about the fixation of the blame, but at one point even the western media also agreed that police is slow in taking action against white offenders while they are swift in pouncing upon black suspects. As mentioned earlier, it is not a 'civil war and catastrophe' predicted by anti-black leader Enoch Powell, even as late as March 1981. Except a few areas of conflict, people stay without any problems of racial injustice. But such incidents can build up the future threat and this is what disturbs the black community in the United Kingdom.

Recently I had an occasion to meet a few Asian leaders in Bradford—Mr Ajeeb Ahmed from Pakistan and Mr Busan, Mr Johar and Mr Singh from India. In an informal chat they agreed that there is no imminent threat to most of the immigrants. But they shudder at the thought that a person like Powell may enter into Home Office—a situation not immediately possible but also not unlikely looking to the polarisation that is taking place in British politics. The Nationality Bill, on paper, gives equal rights to legal immigrants but poses certain threats. The Home Secretary can reject a naturalisation application from any immigrant without giving any reason whatsoever. Of course he is bound to take his decision without the prejudice of colour or race. But when he is not supposed to disclose his grounds for rejection how can you conclude that he took his decision justly?

These are the genuine feels. There are unreasonable expectations also. Indians would like to have the best of both the worlds. They want to take British citizenship and want India to grant them the right of dual citizenship. They recall the pledge given by the former Foreign Minister, Mr Atal Bihari Vajpayee, in his Royal Albert Hall speech that if Indians could trace their origin to India, they could have Indian citizenship any time they like. There are practical problems in implementing this pledge. Our Constitution has specific provisions about citizenship and it may not be able to satisfy Indian settlers in the United Kingdom. They have to make an ultimate choice between British citizenship and Indian citizenship. But what happens to them if they choose the former and they are driven out by extremists under the pretext of voluntary repatriation about which many ruling party MPs are talking these days? This is what bothers Asian leaders and this is the point of the campaign of one of the prominent Asian leaders, Mr Praful Patel, who in 1976 managed to get contents of Mr Powell's speech, even before it was delivered.

While the violence in the United Kingdom is still on, I am reminded of my conversation with a Scotland Yard official who politely tried to explain the problems confronting the police when they handle a violent mob. We in India cannot imagine a police force which is unarmed, which does not use fire arms like Diwali crackers as our police force does and which has recently used tear-gas for the first time. His argument was, if a white policeman stops a white man and tells him to remove his car from the wrong parking, all will consider it as a policeman's normal duty. But if the same happens with a black man he will complain that he is being harassed. He defended the excessive presence of plainclothes police in Brixton which, according to some, sparked off the worst riots in that area last April, by saying that without their presence riots would have been still more uncontrollable. One would like to accept his argument, but facts do not support it always. There is an element of racial prejudice in white police which occasionally induces them to take a lenient view of white offenders. Democracy there is still strong and the victims are not so oppressed. So things come out as they are coming out in the Brixton enquiry being conducted by Lord Scarman. Superiors in the police force are becoming increasingly aware of the discriminatory attitude of lower level officials.

All these pose a threat to the immigrant population of the United Kingdom. As Mrs Thatcher says, on paper they have equal rights as Mrs Thatcher herself has. But in practice the colour of the skin prevents them from enjoying equal rights and equal opportunities. If the new generation of white people which is bred in the climate of violent hatred towards blacks which is alarming, Skinheads—a popular term for the young white boys with thinly cropped hair remind us of round heads of Oliver Cromwell's era will grow. They have similar rigid attitudes this time not against cavaliers but against black population. On one evening when a young Indian journalist Kalpesh Solanki was driving me through Silex Street where his father's newspaper *Garavi Gujarat* is housed, we saw young boys of 8 and 10 years with hatred in their eyes, envying a young Indian driving a Mercedes and running behind the car with the intention of stoning it. If the mental attitude of these young boys became widespread and if their representatives sit in Parliament, I shudder to think about the future of black population in that country.

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DATELINE NEW DELHI

Inflation: No instant remedy

From ARVIND BHANDARI

ANY attempt to control inflation has to be based on a long-term drive and not an instant package. The price level in the macro-economic sense is best viewed in terms of inter-action of aggregate demand and aggregate supply. The point of intersection between these two curves has to be prevented from rising, if not lowered. Uptil now the Government's anti-inflationary thinking has tended to be one-sided, dwelling on "supply management". However, imperatives of the inflationary situation are inducing the realisations that the demand side also counts. Whatever anti-monetarists may contend, supply of money is a major factor influencing aggregate demand. The growth of money supply, instead of slowing down with the onset of the slack season, actually speeded up. Of the increase in total monetary assets (M3) which took place in the year ending May 23, one-fifth occurred in the last seven weeks after the slack season had started. It is the Government itself which is the villain of the piece. While credit to the private sector rose by Rs 786 crores during this seven-week period, credit to the government sector rose by a staggering Rs 2,273 crores. The statutory cash reserve ratio is to be increased by one per cent in two instalments, the first instalment having already become operative from the beginning of this month. There is talk of impounding the various increases in the dearness allowance of government employees which have become due on the basis of the consumer price index.

There is also talk of restraining the labour's clamour for higher wages, although how this squares with the reported simultaneous move to once again raise the ceiling on executive incomes from Rs 5,000 to Rs 7,500 defies comprehension. All these measures and moves would be rendered infructuous unless the Government checks its own profligacy. It is bad enough that because of various factors, failure of the bearer bond scheme being one of them, the year would end with a deficit of at least Rs 2,000 crores at the Centre and about Rs 1,000 crores in the states. The situation can only worsen if no attempt is made to curb superfluity, wastage and non-development expenditure. As for the subsidies, whose burden is approaching Rs 2,000 crores, the Planning Commission's repeated exhortations to prune them continue to fall on deaf ears. The only concession made by the Government to economy is the reported move to ask the Economic Administration Reforms Commission what to do! When somebody, that is the Government, is handling somebody else's money, that is the public, economy requires a high degree of altruism and political will, both of which are lacking.

Nonetheless, Milton Friedman is wrong in placing total reliance on curbing money supply growth as a panacea for inflation. Even if the money chasing goods and services increases, prices may not increase if the goods and services themselves increase, which brings us to the question of aggregate supply. It is noteworthy that during the heyday of the Janata regime in 1977-78 and 1978-79 the price rise was very nominal although money supply in the two years increased by 15 per cent and 19 per cent, respectively. Aggregate supply in effect means production. Agricultural production in 1980-81 has been good, the food output touching a peak of 135.5 million tonnes. Food production target for the current year is 138.5 million tonnes. In this context, however, it is important to remember that the improvement has not had a dampening effect on prices because of the policy of interference with the market and fixation of minimum support prices at progressively higher levels. On the industry side the position is dismal. Production in 1980-81 increased by only 3.6 per cent as against a target of 8 per cent. Apart from the problems it has to face because of infrastructural deficiencies—removal of which will have to be a cardinal point in any anti-inflationary programme—Indian industry should be freed from the shackles of excessive controls. No doubt certain concessions have been made, but what has been done does not go far enough. The Finance Minister himself is on record as conceding that there is scope for reducing controls. If the Government is serious, it should adopt the principle that forms the basis of the Dagli Committee report on controls and subsidies: that only such controls are justified which have a direct bearing on the welfare of the weakest sections of the population. Dismantling of the rest of the constrictive apparatus would thus become an integral part of an anti-inflationary policy. Fiscal policy is another aspect that requires careful examination on the supply side. Opinion is widespread, not without justification, that the present taxation structure is not calculated to boost production. But if the controls and taxes are reduced, from where would the election funds come? Therein lies the rub.

Maruti Udyog

The Minister of State of Industry, Dr Charanjit Chanana, had stated that the Government would announce its decision regarding foreign collaboration for Maruti Udyog Limited by the end of June. Now it seems that a decision would take much longer. My inquiries reveal that the power to take a decision is no longer vested in the Industry Ministry but in the management of the public sector company which appears to have been handpicked by the Prime Minister. For instance, the vice-chairman of Maruti Udyog is the same Mr V. Krishnamurthy who some time ago was eased out as Secretary, Heavy Industry. Quite understandably, therefore, Dr Chanana could be expected to be over-cautious in taking any initiative in the matter. Another delaying factor appears to be the insistence of the Government that the foreign collaborator should not only participate up to 40 per cent in the equity but also extend soft loan financial assistance to the company. This would seem to tilt the balance in favour of the state-owned Renault of France. M.A.N. and Volkswagen of West Germany are unlikely to meet the Government's financial expectations. Fiat of Italy has opted out on the ground that a project which stipulates 50 per cent production for export cannot be viable if located in the hinterland. Nissan of Japan appears to have become lukewarm. In his presidential address at the recent annual meeting of the Association of Indian Automobile Manufacturers Mr C. V. Karthik Narayanan did not make even a passing reference to the impact the Maruti project would have on the automobile industry. But in private conversations with some automobile magnates I noticed a certain unease. After all, Maruti will have an annual capacity to produce 100,000 cars, whereas the present combined capacity of all private sector units is 53,000 cars.

EASTERN INDIA TODAY

Iron ore industry in doldrums

By P. C. MAHANTI

IRON ore mining is an important economic activity in eastern India which contributes substantially to the flow of income and volume of employment in the region. If proof of this were needed it is the fact that five of the existing six state steel plants are located in the region because of its extensive iron ore resources in combination with massive coal deposits. Unfortunately mining activity for this important mineral has of late declined with its inevitable depressing effect on the region's economy.

Several factors are responsible for the decline but most of them are manmade. For example the public sector steel plants have rather grudgingly raised the price to Rs 47 per tonne from Rs 42 per tonne they paid a year ago. A technical committee that recently went into the cost structure of the iron ore industry in the eastern region has held that the steel plants should pay at least Rs 56 to Rs 58 per tonne for the mineowners to get something of an economic price. The Minerals and Metals Trading Corporation (MMTC) through its own studies has come to the conclusion that the right remunerative price is Rs 60 per tonne which comes nearer to Rs 66 per tonne that the mineowners want.

In the circumstances payment of only Rs 47 per tonne by the steel plants naturally means a big loss for the iron ore industry and all privately owned mines will be facing the prospect of closure if the current price is not suitably revised in the near future. In fact, the Orissa Mining Corporation has already decided to stop supplying iron ore to the MMTC meant for the steel plants just to force the domestic monopoly buyer to reopen the price issue. The steel plants of course have their own captive iron ore mines but they still buy roughly one million tonnes from outside sources through the Minerals and Metals Trading Corporation. This is a critical quantity without which their production will be affected and the steel plants are bound to feel the pressure of demand for a price revision when public sector producers are threatening to suspend supplies.

The second upsetting factor is a big drop in the quantity lifted for export. The MMTC last year purchased only 1.31 million tonnes of iron ore for the export purposes as against three million tonnes a year ago. The current rate of lifting is at the still lower annual rate of just one million tonnes. Moreover, the order is distributed so unevenly that for some mines it is a meagre 100 tonnes per month. Rather than keep the mines open to execute orders for such paltry quantities several mineowners have reportedly closed down operations already. Not many private mineowners are in the position of the Orissa Mineral Development Company, which belongs to the BIRD Group now taken over by the Government, which can afford to curtail iron ore mining according to the exigencies of the situation and to sell iron ore at Rs 47 per tonne and still be in business. An interesting point worth noting here is that according to some private mineowners the average cost per tonne of iron ore mined from captive sources of the public sector steel plants works out to Rs 90 per tonne.

The industry has been pleading that the MMTC should ask for subsidies from the Government if its own realisations are unremunerative rather than squeeze the mineowners who have little capacity to suffer further losses. Moreover state governments have of late enhanced various statutory levies which are not covered by the price that the MMTC pays to them. The recession in the world steel industry may be largely responsible for the MMTC's lower exports from this region but there can be no justification for denying a fair price to the industry when the lower demand for the ore is no way its fault.

The fall in overseas demand apart, there are distinct infrastructural bottlenecks which are affecting exports. Paradeep port has been handling only five thousand tonnes of iron ore per day as against its rated capacity of 24,000 tonnes per day. The port could be developed to accommodate even 100,000 dwt vessels to load 25,000 to 30,000 tonnes of ore per day. It is for the authorities to move expeditiously both in the interest of the iron ore industry, the MMTC and the port itself. The Banspani Daitari railway line that could bring down transport cost to the port from the iron ore belt of the region by half is still to be completed. None of this is a fault of the industry which deserves to be kept alive through the payment of at least a fair price.

British Airways

If the report that British Airways which has been serving eastern India *via* Calcutta airport for the past fifty years is planning to fold up its operation in phases is correct, then the economic environment in the region is really deteriorating fast. All major international airlines have already withdrawn from Calcutta leaving only British Airways in the field, apart of course from India's own Air-India which too has curtailed service by dropping its direct Calcutta-New York flight already. As for British Airways it too has reduced services through Calcutta from six to four a week and has withdrawn its wide bodied 747 aircraft replacing them by smaller Tristar 500s. It is reportedly planning to reduce the staff as well. This may well be the result of the strains like the enormously increased operational costs which the British Airways has been having to contend with. It really cannot go on operating on routes which are becoming commercially less and less viable due to falling traffic and obviously Calcutta airport is attracting less and less international traffic these days which, in turn, is the result of economic stagnation of public investment.

The fall in the consumption of low density polyethylene in the eastern region is causing serious worry to the Indian Petrochemicals Corporation which is about to conduct a market survey to discover ways of stepping up sales. The corporation estimates that the normal demand for low density polyethylene in the region should be at least 11,000 tonnes but the current consumption has come down by more than 30 per cent due to political uncertainly, power shortage and other constraints. With the constraints removed offtake can be raised by six to eight per cent. The user industries, however, say, that IPCL prices the product too high, much higher than the international prices. If the price can be reduced not only would domestic demand pick up but there would be a readymade export market on the doorstep — in Bangladesh.

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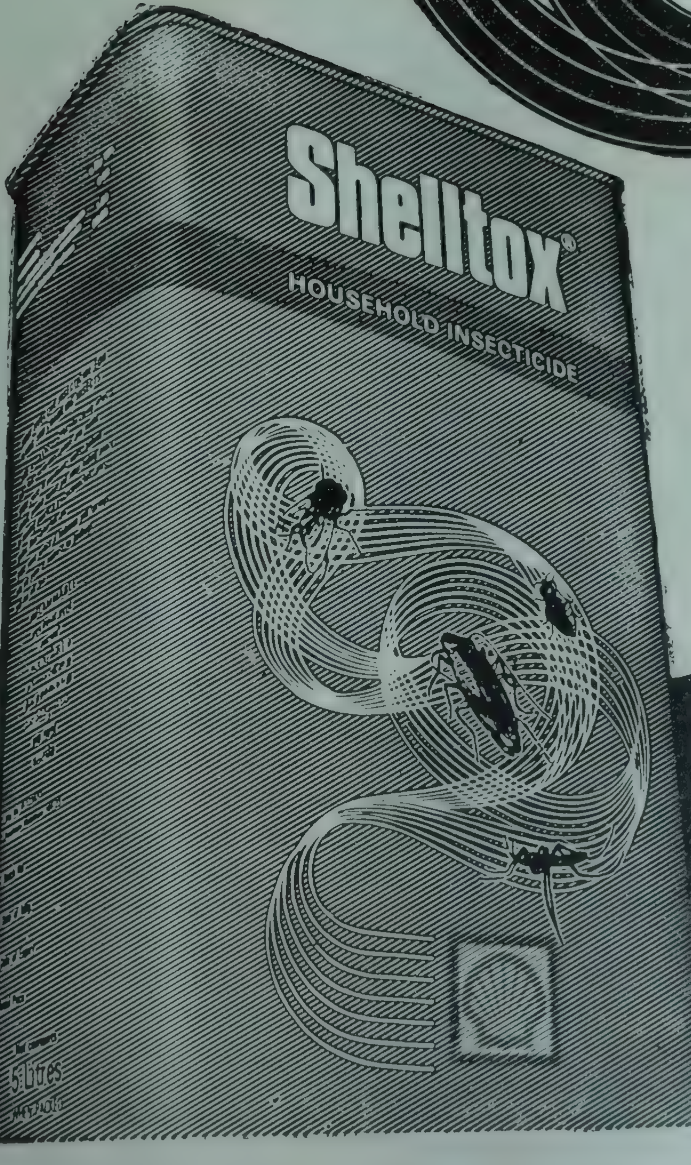

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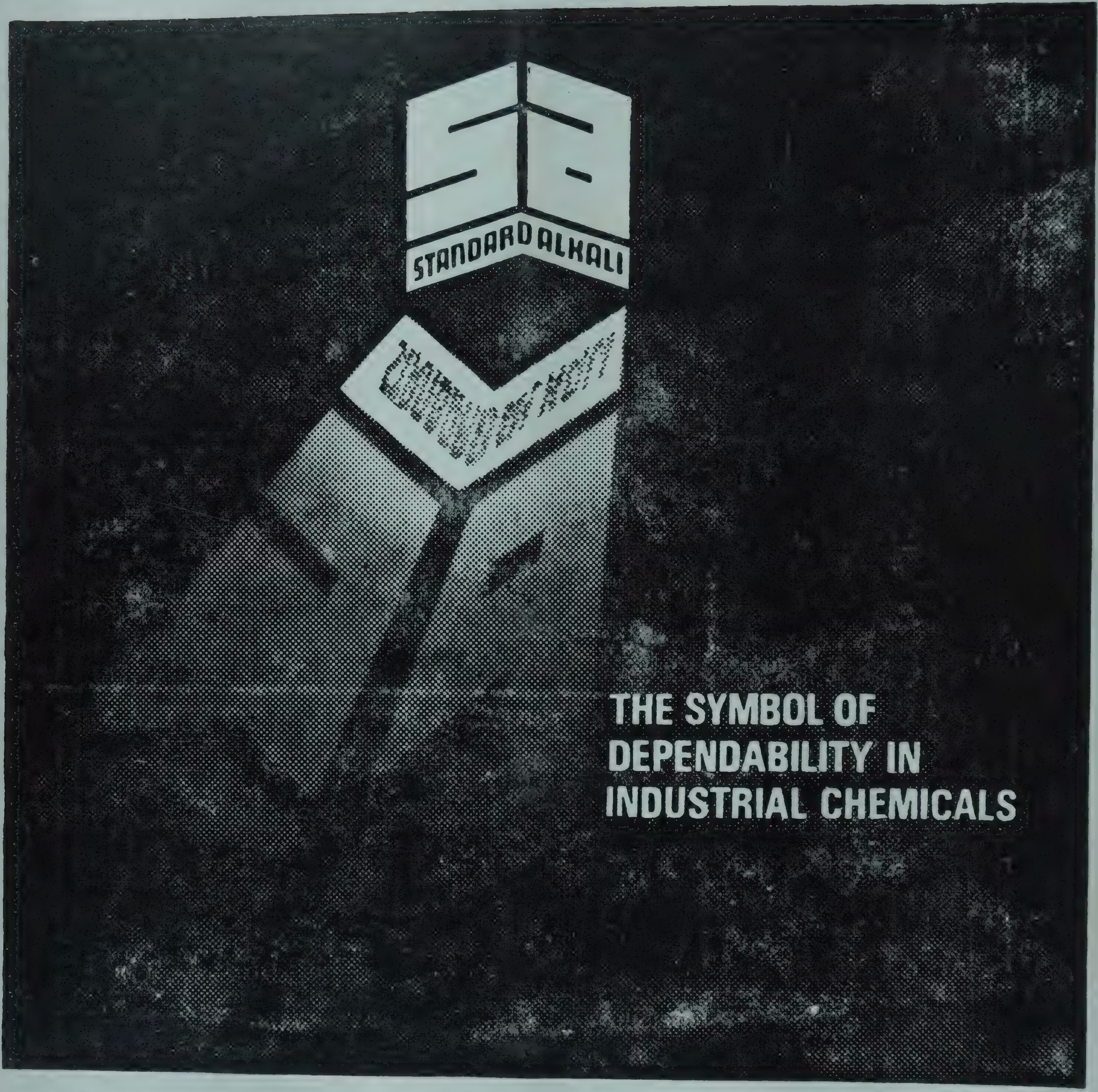

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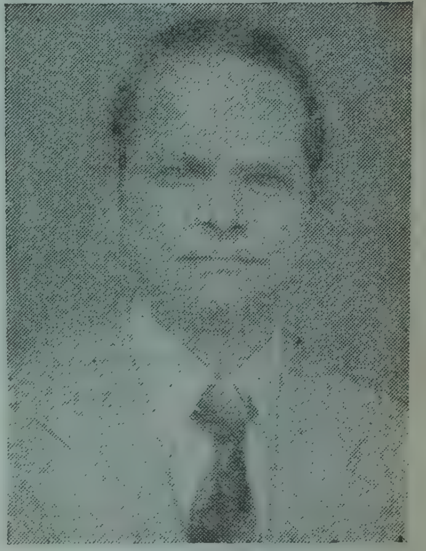
PRESSMAN

PESTICIDES INDUSTRY— TODAY & TOMORROW

—A FEATURE

Chemical crop protection in Indian agriculture

By A. L. MOOKERJEE



Dr A. L. Mookerjee

ONE way to increase the supply of food is to prevent waste. The "War on Waste" according to the Food & Agricultural Organisation (FAO) could become the most important factor of all, in the battle against malnutrition. The problem is becoming progressively more acute with annual losses from the available land area through soil erosion, industrial development and urbanisation.

In India, the unabated population growth continues to exert increasing pressures on land for more food and fibre despite recent commendable achievements in the agricultural front. The National Commission on Agriculture forecasts a population of 724.91 million in 1985 from the present 680 million level, which will rise to 935.35 million in 2000 A.D. In this context, the foodgrain production of 135 million tonnes in 1980 is a good achievement and the Ministry of Agriculture, Government of India, has fixed a target of 154 million tonnes for 1985. The stupendous task to feed the multitude, however, rests only on 141 million hectares of land (net area sown) out of the total geographical area of 328.8 million hectares in the country. To meet this challenge, the only alternative lies in increasing the productivity from the available land source.

The intensity of cropping is largely dependent to areas with facilities of irrigation. The present irrigated area of 52.2 million hectares will be stepped up to 69.2 million hectares by 1983 out of the total assessed potential of 113.1 million hectares. Besides water, the important inputs that contribute to higher yields are seed, fertiliser and pesticide.

In the seed front, introduction of high yielding varieties in the mid sixties had far reaching effects in achieving the goals of higher productivity. Concurrently, the use of fertilisers (nitrogen, phosphorus and potassium) also increased substantially in the seventies (from 23 lakh tonnes in 1970 to 53 lakh tonnes in 1980). Efforts are underway to raise fertiliser (NPK) consumption to 67 lakh tonnes in 1981 and 75 lakh tonnes by 1983. Greater use of fertilisers and improved seeds or a change in the crop sequence entails a change in the crop environment (agro-climatic change) that accelerates pestilence to formidable intensities inflicting serious crop losses. The recent outbreaks of brown plant hopper and gall midge in rice, canary grass in wheat, stalk borer in sugarcane, blast and blight diseases in rice are but few of the endless examples confronting the present day crop protection experts. Breeding varieties resistant to pests or diseases is still a breeder's dream, neither are they in sight of acheiving it. Nor does the concept of biological control provide a forseeable alternative. The onus to save whatever is produced is, therefore, mainly on the rapid extension and intensification of chemical crop protection programmes in the country.

The waste that occurs in the field and in storage is colossal. The average food grain losses in India due to pests is more than 20 per cent of the total production and the consequent annual economic losses amount to over Rs 5.000 crores. Efficient crop protection practices can considerably obviate this serious loss. The value of crop protection has been successfully illustrated by work in India which showed that insect control in rice alone increased yield by 18 per cent, control of fungi by 14 per cent with the cost benefit ratio of 1:4 and 1:3 respectively. This highlights the importance of pest control in agriculture for rapid improvements in the productivity of our agriculture.

Progress of plant protection in India

With a very modest beginning in the early fifties, plant protection activity had made rapid strides in India in the recent years. The rate of consumption of chemical pesticides in agriculture in the past two decades indicates a phenomenal growth from 460 tonnes in 1954 to 40,534 tonnes of technical grade pesticides in 1980.

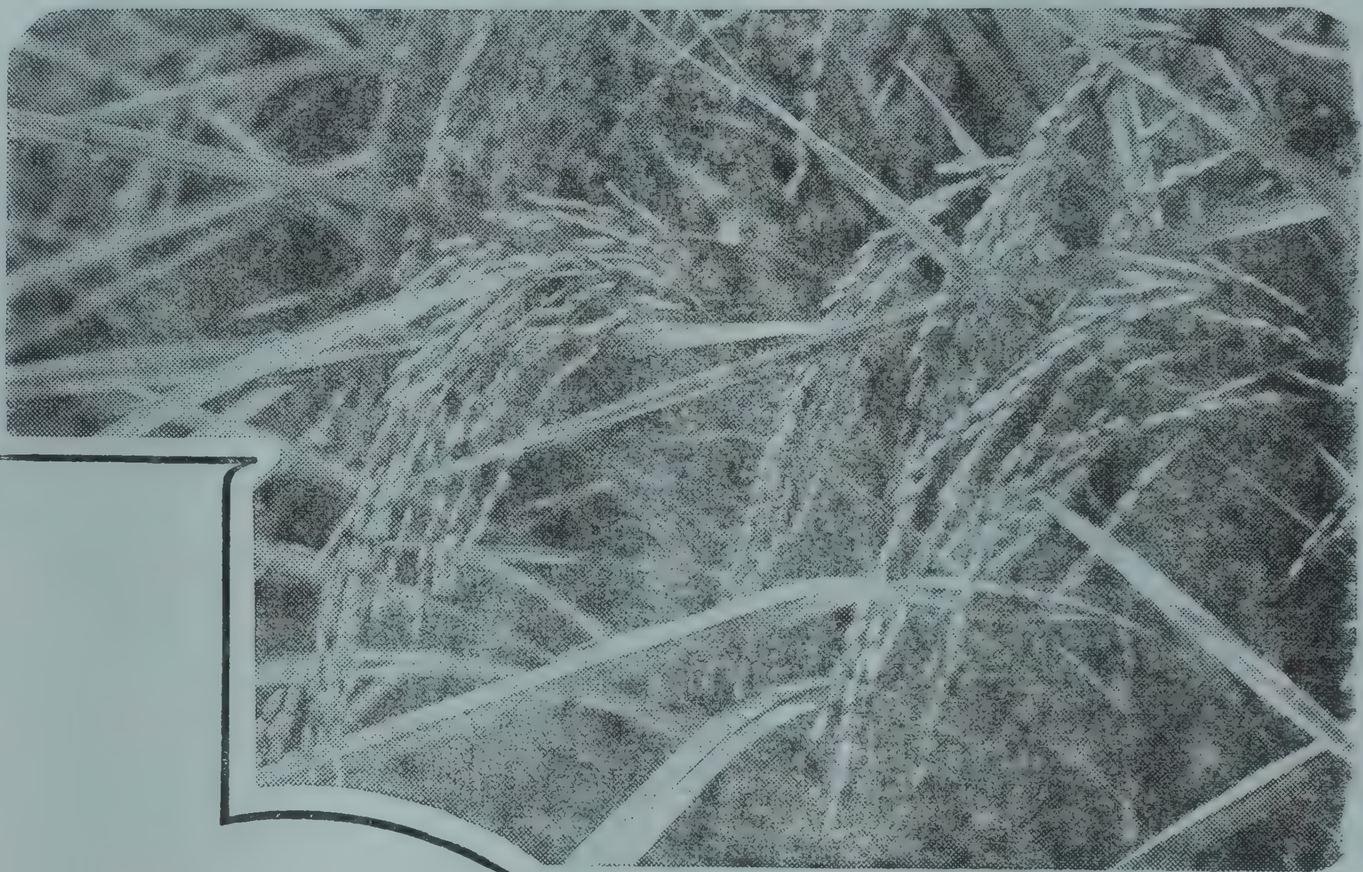
The available figures indicate that a breakthrough in pesticide consumption in agriculture was observed in the seventies when the annual consumption increased by about 30,000 tonnes in 10 years time. The public health pesticides use also increased during this period and the average present level is around 18,000 tonnes of technical grade insecticides annually.

The total area treated by pesticides also increased to 63.3 million hectares in 1980. The trend, though apparently seems encouraging in terms of coverage and consumption, fell short of the expectations to cover 100 million hectares quickly by chemical crop protection measures by the end of the 5th Five Year Plan. The estimated requirement of pesticides to cover 100 million hectares is about 80,000 tonnes. Large coverage undoubtedly increases consciousness and realisation of the value of crop protection chemicals for higher yields, the use levels, per unit area, however, will be still low when compared to the requirements needed for satisfactory returns.

Continued on page 11

Dr Mookerjee is technical manager, Cyanamid India Limited, Bombay.

Insecticide producers . . .
Capitalise on RCF's Methylamines



India's fast-growing insecticide requirement warrants quick action. It is an opportunity to capitalise on the easily-available RCF's Methylamines made to international specifications.

Like Carbaryl, Dimethoate, Carbofuran and Monocrotophos, many more better, safer and less toxic insecticides—all based on Methylamines—are on the way. And the indigenisation of technology would mean a further shift towards Methylamines-based insecticides. Is it not an inviting opportunity?

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RCF-dedicated to the growth of India's agriculture and industry

Association of Basic Manufacturers of Pesticides

By AN INDUSTRIAL CORRESPONDENT

AGRICULTURE is the backbone of the Indian economy. Five hundred million people, out of a population of 650 million depend on agriculture for their livelihood. Agriculture accounts for about half of the country's national income.

Out of a geographic area of 329 million hectares, 173 million hectares (more than 50 per cent) are under cultivation. The primacy of agriculture for the Indian economy and rural development is reflected in the Government's programme in this sector. The Sixth Plan (1978-83) envisages an outlay of Rs 8,600 crores for agriculture and allied sectors; and Rs 9,650 crores for irrigation and flood control. The present irrigated area of 52.2 million hectares will be increased to 69.2 million hectares by 1983 out of a total assessed potential of 113.1 million hectares.

Multiple cropping with high yielding varieties: cultivation of wheat, rice and cotton in non-traditional areas as well as in the command areas of irrigation projects and introduction of additional crops in the rabi season are some of the cultivation strategies to boost agricultural production in the country and bring prosperity to the rural areas. Inevitably and essentially, therefore, the main thrust to the Indian economy and to rural development must come from agriculture.

Importance of pesticides in agriculture and national health

Pesticides have been recognised as one of the essential inputs for modern agriculture. India loses every year up to 20 per cent of its foodgrains, valued at over Rs 5,000 crores, due to damage by pests. Though the major portion of the produce is lost in the fields, a substantial quantity of foodgrains in storage is devoured by pests. Effective and safe pesticides are needed in sufficient quantities to minimise these losses. The consumption of pesticides in India has grown from 3.2 gm/ha in 1954-55 to 435 gm/ha in 1975-76; but it is still much lower than in developed countries: Japan 10,790 gm/ha; USA 1,490 gm/ha and Europe 1,870 gm/ha. The requirements of pesticides for agriculture have been projected at 64,290 tonnes in terms of technical grade materials for 1983-84.

Pesticides play an important role also in the national health programmes by providing effective control of vectors through which a number of dreaded diseases like malaria, filaria, cholera, kala-azar are communicated. The requirements of the National Malaria Eradication Programme and other public health usage for the year 1983-84 have been projected at 48,000 tonnes of pesticides in terms of technical material. Pesticides are also widely used in households for the control of insects like mosquitoes, cockroaches, silver fish, domestic flies, bed bugs, etc. They also help keep the domestic pets free from ectoparasites.

The total consumption of technical grade pesticides during 1978-79 is estimated at approximately 60,850 tonnes of which 49,850 tonnes were met from domestic production and 11,000 tonnes from imports. The total market for pesticides is estimated at Rs 175 crores. By 1983-84 the total demand for pesticides in terms of technical materials is expected to be around 112,290 tonnes.

In India, the basic manufacture of technical grade materials commenced in 1952, thanks to the Government's far-sighted policy in this direction. Today, there are 25 units in the country manufacturing basic pesticides with an installed capacity of 73,750 tonnes per annum. By setting up these units, the basic manufacturers made available to the country the fruits of international research in the development of new pesticides as well as modern technology for their production, formulation and quality control. Basic manufacturers also undertook considerable research work in developing process technology to utilise indigenous raw materials and intermediates that did not always conform to the standards specified by the manufacturers of basic pesticides in foreign countries. They also played a major role in developing ground and aerial spraying techniques as well as appropriate application equipment suitable to field conditions prevailing in this country.

Presently, the products of basic manufacturers conform to international standards in regard to quality, efficacy and safety. Farmers in India have the benefits of many modern pesticides of world standard—insecticides, herbicides, fungicides, nematocides, acaricides—and the country, a modern industrial base to meet the increasing demand for the present range of pesticides and for the development of new products.

The wide choice of pesticides made available by basic manufacturers have complemented the other agricultural inputs like hybrid seeds, fertilisers, water and soil management, irrigation, thereby contributing to the green revolution as well as in minimising the incidence of communicable diseases.

The green revolution and the national self-sufficiency in foodgrains are testimony to the indispensability of pesticides in the agricultural package of practices. India is among the few countries in the world manufacturing basic pesticides. Twenty-five basic manufacturing units today produce about 50,000 tonnes of 45 difference types of technical grade material and their formulations.

Basic manufacture is highly capital-intensive. It involves substantial investments in research, sophisticated technology for production and quality control, effluent treatment, toxicologial studies, field trials, and on control of environmental pollution. Since manufacture of pesticides is highly corrosive to the plant and machinery, heavy recurring expenditure is incurred on maintenance and depreciation. The working group on pesticides industry, set up by the Ministry of Petroleum, Chemicals & Fertilisers, Government of India, has estimated the requirement of additional investment in the pesticides industry by 1983/84 at Rs 58.75 crores.

In addition to being expensive, basic manufacture of pesticides is a high risk industry. Risks include product obsolescence arising from the discovery of new pesticides, as well as resistance developed by pests, the vagaries of weather and the uncertainties associated with the type and degree of pest infestation. Manufacturers of basic pesticides provide the foundation for the development of the pesticides industry along scientific lines — from research to ultimate consumption.

Research: Research is leading to the discovery of a commercially viable new pesticide goes through several steps, starting from the chemical synthesis of a new activity molecule to intensive primary and extensive secondary screening for biological activity, toxicity studies and to process and formulation development. Such research is extremely expensive and time-consuming. The current estimate of expenditure on research to discover a commercially viable new pesticide is approximately Rs 12 crores.

Technology: Basic manufacturers have access to the

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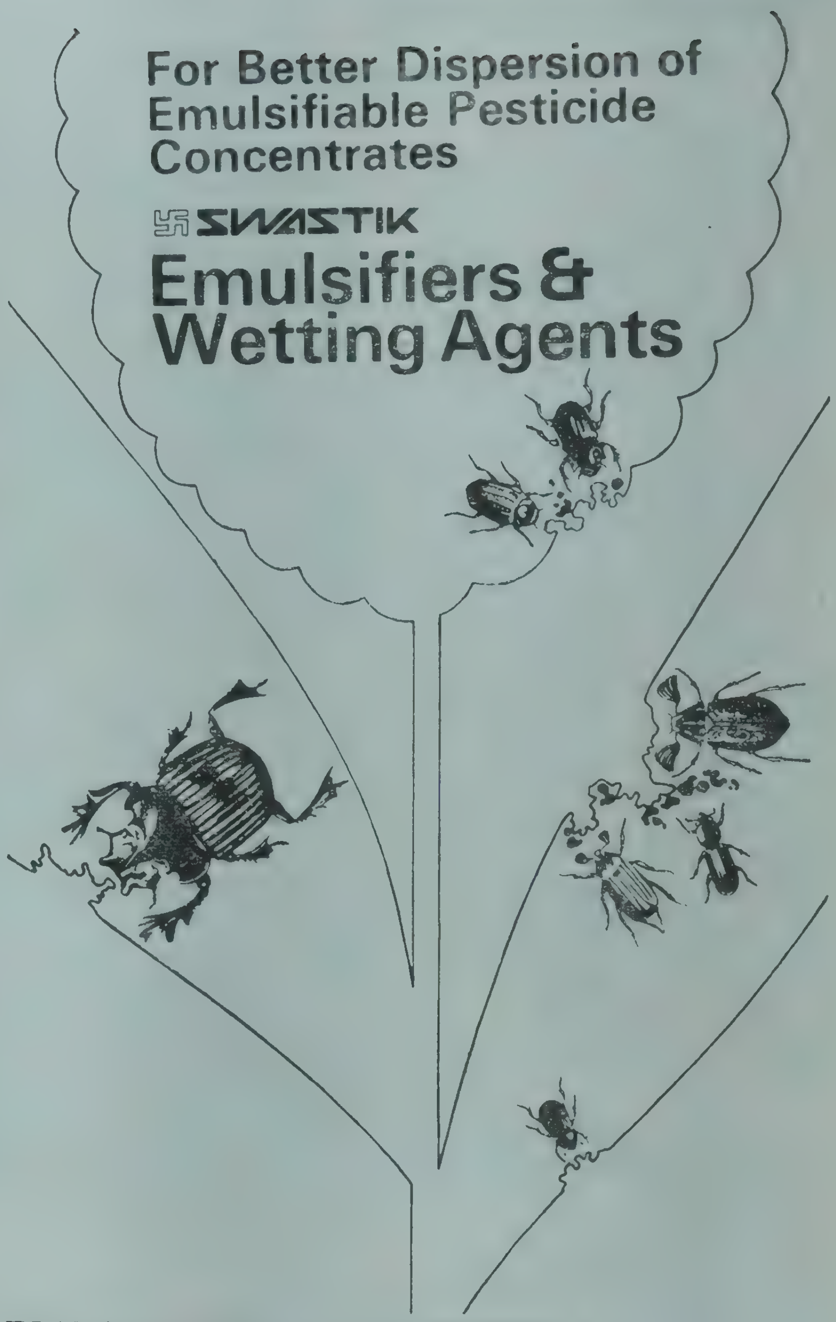

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latest production technology - indigenous and international. It is this technology, developed after years of expensive research all over the world, that has made possible the current (1978-79) level of production of 49,847 tonnes of technical grade material, which is estimated to increase to a level of 112,290 tonnes by 1983-84. Forty-five items of technical grade pesticides are now made in the country. Sixty-eight others have been registered by the Central Insecticides Board.

Quality control : The invisible but an extremely important ingredient in a product is its quality. Quality control is necessary at every stage of manufacture — from raw materials to intermediates and finally the basic pesticides and its formulations. Quality control even of the packaging material is essential to ensure product stability in the varied agro-climatic conditions prevailing in the country. For ensuring highest standards of quality, sophisticated and highly expensive equipment is necessary. Basic manufacturers have the wherewithal as well as the personnel to undertake the task, contributing thereby not only to high standards but also to consumer consciousness of quality.

Extension — farmer education : Before a basic manufacturer introduces a pesticide to a farmer, his field staff study the farmer's methods of cultivation. Besides advising on methods of plant protection, the field staff explain the Government's agricultural package of practices in relation to the varieties to be sown, soil improvement, water management, fertiliser application, etc. In addition, a farmer has to be taught when and how to use a pesticide. The field staff educate the farmers in identification of pests, determination of the level of incidence, selection of a suitable pesticide and the right equipment, the right dosage, the right method of application and the right precautions. The field staff therefore undertake significant extension work thereby supplementing the efforts of the extension staff of the States' Agriculture Department.

A Lab-to-Land communication network has been established by basic manufacturers through the media of demonstrations, field days, village fairs and farmers group discussions when film and audio-visual aids are employed to teach improved methods of cultivation. The field staff employed by basic manufacturers are graduates in agricultural sciences and are given intensive training in modern agricultural practices. At present they number around 600.

Distribution : Pesticides have to reach farmers in remote villages. Basic manufacturers have long experience in marketing pesticides and have set up a country-wide network of distribution points estimated at 35,000 wholesale and retail outlets.

Special responsibility

Basic manufacturers of pesticides, by virtue of their scientific resources, technological capability and their financial commitments are vested with a special responsibility within the overall pesticides industry.

This responsibility has a direction and dimension of its own. The complexity and magnitude of the tasks call for a select, professionally managed and appropriately qualified administrative organisation that can devote its time and attention exclusively to the management of these responsibilities.

These tasks, geared to the promotion of agriculture and national health in the country, encompass :

(i) Realistic estimation of demand for individual pesticides to provide a rational basis for planning the growth of the industry and of imports of compounds not locally manufactured. This exercise will necessitate close monitoring of cropping patterns and pest problems. (ii) Compliance with the Insecticides Act and Rules. (iii) Maintenance of high quality standards. (iv) Monitoring the availability of pesticides at reasonable prices. (v) Ensuring widespread distribution of pesticides so that they are available within easy reach of the farmer. (vi) Intensification of farmer education in the proper usage of pesticides and rendering associated extension services. (vii) Undertaking scientific field trials to determine the bioefficacy and suitability of different pesticides under Indian agro-climatic conditions. (viii) Generation of texicological data. (ix) Minimising hazards related to environmental pollution. (x) Introduction in India of pesticides discovered through latest domestic and international research. (xi) Providing information to the Government about the pesticides industry and submitting proposals to the Government to enable it to formulate policies which are conducive to the long-term growth of the industry.

These diverse tasks can best be achieved by basic manufacturers of pesticides working collectively through an association of their own. In fulfilment of this objective, an Association of Basic Manufacturers of Pesticides has been established.

Services

The Association plans to render the following services :

Government : (a) Collate data, productwise, on sales, consumption, production and imports of pesticides on a regular basis. Efforts will be directed towards building a reservoir of information on Statewise acreages of various crops, agricultural practices, etc. This data will provide a scientific basic for making projections of demand. Appropriate recommendations will be made to the Government authorities concerned, enabling the Government to plan for the required industrial capacities as well as compute and allocate the foreign exchange requirements for imports.

(b) Monitor the availability of pesticides and make suitable recommendations to the Government.

(c) Keep a close watch over the trend of international prices of pesticides and inform the Government of major developments.

(d) Provide a forum for sharing the industry's experiences with the Government and assist the Government in the implementation of its policies.

(e) Maintain a regular and meaningful dialogue with Government on problems facing the pesticides trade and industry and recommend appropriate remedial measures.

(f) Periodically undertake special studies on various aspects of the pesticides trade and industry and advise Government. The Government can then take these facts into account when evolving its policies.

(g) Collaborate with the Government at the Centre as well as in the States, in the effective implementation of Insecticides Act.

Farmers: Quality control of pesticides produced and marketed by basic manufacturers will be strictly maintained. Promote the safe and responsible manufacture of pesticides; Ensure self-discipline among its members, in regard to fixing domestic selling prices of pesticides at a reasonable level; Every effort would be made to regulate the intermediary trades activities in order that the farmer is able to procure his requirements at prices not exceeding those fixed by the basic manufacturers.

Promote the introduction of new pesticides discovered in India as well as in foreign countries—which would benefit Indian agriculture and public health.

Universities and Research Institutions : Make available to Government and research institutions, the benefit of the technical expertise of its members in the fields of production, quality control, application know-how, extension service, bioefficacy trials and toxicology.

Industry : Promote and regulate the development of the pesticides industry and trade on sound and proper lines. Contribute to the growth of the pesticides formulation industry in the small-scale sector, in keeping with Government's objectives and policies.

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I.Pi.Ci. Spa. Milano (ITALY)	sorex Sorex (London) Ltd., Middlesex (U.K.) Ciech Ciech Organika, (POLAND)	TENNECO Tenneco Chemicals, New Jersey, (U.S.A.)	Avitrol Avitrol Corporation, Oklahoma (U.S.A.)
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Role of methylamines in pesticides manufacture

By **K. M. BHIRUD**

RASHTRIYA Chemicals & Fertilizers Ltd produce valuable inputs to agriculture *i.e.* fertilisers such as suphala (15:15:15), suphala (20:20:0) and urea (Ujjwala). Besides this, they also manufacture industrial chemicals such as methanol, dimethyl ether, nitric acid, ammonium bicarbonate, sodium nitrate and sodium nitrite to meet the requirements of various industries in the country.

Dr Bhirud is an entomologist with Rashtriya Chemicals & Fertilizers Ltd, Bombay.

RCF have also realised the need of producing the raw-materials required for the production of pesticides *i.e.* methylamines (mono, di and tri) which are used in the manufacture of carbaryl, dimethoate, ziram & thiram, thereby helping achieve self-sufficiency in agricultural production. In our country more than 70 per cent of our people earn their livelihood from the farms. In times to come, we require more food-grains to be produced for an overgrowing population in addition to the present level. Efforts are being made to achieve more agricultural production by intensive cultivation of the land, use of hybrid and high yielding varieties of crops, fertilisers, irrigation and also by applying modern techniques of agriculture.

An analysis of the plant protection drive shows that the strengthening of pest control measures has not kept pace with the speed of the production drive, resulting in loss to the extent of Rs 5,000 crores. It has been estimated that annual losses by pests and diseases are to the extent of about 40 per cent of the total production. It has been observed that with increased fertiliser consumption and the use of hybrid varieties, the incidence of pest infestation also increased proportionately. So, the use of pesticides is essential for saving our valuable crops from the ravages of pests and diseases.

A plant protection schedule has been prepared in order to serve as a guide to farmers as well as to kitchen gardeners for protecting their crops from pests and diseases and enjoy a bumper harvest with a fair return from their land.

Plant Protection Schedule

Sl. No.	Crop	Disease	Pest	Time of application (weeks after planting).	No. of Spraying/ Dusting	Spraying/ dusting interval in days	Name of pesticide	Quantity/ hectare		Water required/ha.- in lit.
								ml.	gms.	
1	2	3	4	5	6	7	8	9	10	11
				Kharif crops						
1.	Cotton (H-4) (Irrigated)	Black arm, anthracnose and alternaria.	Aphids, jassids, thrips & bollworm.	7	9	15	Carbaryl 50% +Rogor 30% E.C. +Copper oxychloride 50% W.P.	— 750 —	1,500) —) 1,875)	750
		—	Red cotton bug.	As & when pest observed	2	15	B.H.C. 10% + D.D.T. 5%	— —	10 kg. 10 kg.	—
	Cotton (H-4)	Black arm. anthracnose and alternaria.	Aphids, jassids, thrips & bollworms	8	6	15	Carbaryl 50% W.P. + Rogor 30% E.C. + Copper oxychloride 50% W.P.	— 750 —	1,500) —) 1,875)	750
		—	Red cotton bug.	As & when	2	15	B.H.C. 10% Dust + D.D.T. 5% Dust	— —	10 kg. 10 kg	—
2.	Hybrid Jowar	—	Shoot fly, aphid, delphacid &	2	4	15	Endosulfon 35% EC.	1,125	—	750
			Midge fly	50% earheads are emerged	2	5	Carbaryl 10% Dust	—	15 kg.	—
3.	Paddy	Bacterial blight, Blast	Stem borer, Leaf hopper	2	3	15	Monocrotophos 40 EC + Copper oxychloride 50% W.P.	625 —	—) 1,250)	500
4.	Groundnut	Tikka	Aphids leafhoppers.	6	2	15	Dimethoate 30% EC + Sulphur 80%W.P.	500 —	— 2 kg.	500
5.	Sugarcane	—	Pyrilla	As and when pest observed	2	15	Malathion 50% E.C.	1250	—	500
			Scales Mealy bugs.	As and when pest observed	3	15	Dimethoate 30% E.C.	2625	—	1,000
			White grubs termites	As & when pest observed	1	—	B.H.C. 50% W.P.	—	10 kg	Apply slight irrigation
6.	Potato	Blight	Aphids, jassids, thrips, mites and tubermoth.	4	3	15	Dimethoate 30% EC. + Ziram 80% WP + Carbaryl 50%WP	750 — —	—) 1,500) 1,500)	750 —
7.	Hy. Bajri	—	Blister beetle	3	3	15	B.H.C.10% Dust	—	20 kg.	—
		Downy mildew	—	When the disease appears	2	15	Zineb (Dithane Z-78)	—	1,875	750
8.	Maize	—	Aphids, jassids, armyworms.	3	2	15	Carbaryl 10% dust	—	20 kg.	—
9.	Tobacco	Damping off.	Aphids, white	2	2	21	Phosphamidon 100% EC +Copper oxychloride 50% W.P	100 —	—) 1,250)	500

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RATE OF INTEREST

Period	TWO YEARS	THREE YEARS
Rate of Interest	14%	15%

SALIENT FEATURES :

1. Deposits will be accepted with a minimum of Rs. 1,000/- and excess in multiples of Rs. 1,000/- only.
2. Interest will be payable half yearly on 30th June and 31st December and on maturity.
3. Deposits and all payments will be accepted by A/c Payee Cheque only at 21, Strand Road, Calcutta-700 001.
4. The deposits will be subject to the Company's Rules and Regulations as indicated in the application form available at the Company's Registered Office.

The business carried on by the Company and its subsidiaries with the details of branches or units, if any:

The company carries on the business of manufacture and sale of cotton cloth blended fabrics and yarn The Company has its Head Office and Sales Office at 21, Strand Road, Calcutta-700 001 and its works at Bauria in Howrah District. (West Bengal).

The Company has no subsidiary, branch or unit.

Brief Particulars of the management of the Company :

The affairs of the Company are managed by the Board of Directors of the Company.

Names addresses and occupations of the Directors :

Name	address	occupation
1. Sri R. N. Bangur	16, AlipureRoad, Calcutta-700 027	Industrialist
2. Sri S. K. Mullick	12, Allenby Road, Calcutta-700 020	Advocate
3. Sri P. D. Bangur	8, St. George's Gate Road, Calcutta-700 022	Industrialist
4. Sri P. L. Daga	35, Muktaram Babu Street, Calcutta-700 007	Business
5. Sri S. C. Chatterjee	11, Tivoli Court, 1A, Ballygunge Circular Road, Calcutta-700 019.	Company Director

Profits of the Company before and after making provision for tax for the three financial years immediately preceding the date of advertisement and dividends declared by the Company in respect of the said years:

	PROFITS (Rupees in lakhs)		DIVIDEND DECLARED (Rupees in lakhs)			
Year ended 31st December	Before Tax	After Tax	On Ordinary	On Preference Shares		
1978	62.02	29.02	10.67 (17.5%)	0.62 0.55	(10.4%) (9.1%)	'A' Pref. 'B' Pref.
1979	67.73	67.73	10.67 (17.5%)	0.62 0.55	(10.4%) (9.1%)	'A' Pref. 'B' Pref.
1980	61.21	61.21	13.71 (15.0%)*	0.62 0.55	(10.4%) (9.1%)	'A' Pref. 'B' Pref.

Dividend on 9.14,301 Ordinary Shares including 3.04,767 Bonus shares issued and allotted on 27th January, 1981

Summarised financial position of the Company as appearing in the two latest audited balance sheets:

Rupees in lakhs

Liabilities	Figures for the latest financial year for which audited accounts are available (as at 31-12-80)	Figures for the financial year previous to the year referred to in col. 2 (as at 31-12-79)	Assets	Figures for the latest financial year for which audited accounts are available (as at 31-12-80)	Figures for the financial year previous to the year referred to in col. 2 (as at 31-12-79)
1	2	3	4	5	6
Share Capital	72.95	72.95	Fixed Assets	453.03	391.41
Reserves and Surplus	223.97	177.64	Investments	2.91	2.18
Secured Loans	346.84	311.19	Current Assets	640.16	518.56
Unsecured Loans	66.58	82.93	Loans & Advances	85.13	51.25
Current Liabilities and Provisions	470.89	318.69	Miscellaneous Expenditure	—	—
			Profit & Loss Account	—	—
Total	1181.23	963.40	Total	1181.23	963.40

Notes: Brief particulars of Contingent Liabilities: (*Rupees in lakhs*)

	As on 31-12-80	As on 31-12-79
i) Claims not acknowledged as debts (including Excise Duty Rs. 15.81 lak hs)	39.85	18.54
ii) Guarantees given by Banks and others on behalf of the Company	52.12	43.91
iii) Bills discounted	66.57	83.53

The Amount which the Company can raise under the Rules as amended :

i) Deposits against unsecured Debentures, Directors' Guarantees and from Shareholders to the extent of 10% of the aggregate of paid-up capital and free reserves	Rs. 28 09 lakhs
ii) Other deposits to the extent of 25% of the aggregate of paid-up Capital and Free reserves	Rs. 70.24 lakhs
	Rs. 98.33 lakhs

The aggregate of deposits actually held on the last day of the immediately preceding financial year Rs. 38.13 lakhs

The Company has no overdue deposits and/or unclaimed deposits as on the date of this advertisement.

It is hereby declared that :

i) the Company has complied with the provisions of the Companies (Acceptance of Deposits) Rules, 1975, as amended ;

ii) compliance with the Rules mentioned above does not imply that repayment of deposits is guaranteed by the Central Government ; and

iii) the deposits accepted by the Company are unsecured and ranking *Pari Passu* with its other unsecured liabilities.

This advertisement is being issued on the authority and in the name of the Board of Directors of the Company and its text has been approved by the Board of Directors at a meeting held on 29th June, 1981 and a copy of this advertisement has been delivered to the Registrar of Companies, West Bengal.

By Order of the Board,
D. C. JAIN
Secretary

Dated, 29th June, 1981.

RAS

Sl. No.	Crop	Disease	Pest	Time of application (weeks after planting).	No. of Spraying/ Dusting	Spraying/ dusting interval in days	Name of pesticide	Quantity/ hectare		Water required/ha.- in lit.
								ml.	gms.	
1	2	3	4	5	6	7	8	9	10	11
10.	Chillies	Leaf ourl. anthracnose. Powdery mildew	Aphids. jassids.	2	3	15	Dimethoate 30% EC Copper oxychloride 50% Sulphur 80%W.P.	500 — —	— 1.250 1,250	500
11.	Onion	Alternaria	Thrips	3	2	28	Endosulfan 35% EC Copper oxychloride 50% W.P.	575 —	— 1,250	500
12.	Tomato	Alternaria	Jassids, thrips, White flies	3	4	15	Dimethoate 30% EC + Ziram 80% W.P.	500 500	— —	500
13.	Brinjal	Little leaf	Aphids, jassids, thrips, shoot and fruit borer	2	4	15	Carbaryl 50% W.P. + Ziram 80% W.P.	— —	1,000 1,000	500
14.	Bhendi	Mosaic, Powdery mildew	Aphids, white flies Mites & spotted boll worms.	3	3	15	Carbaryl 50% W.P. + Sulphur 80% W.P.	— —	1500 1,500	500
15.	Citrus	—	Lemon butter fly, leaf eating catterpillar, aphids, white flies.	As & when pest	2	15	Dimethoate 30% EC	875	—	500
16.	Pomegranate	—	Fruit borer & mites	When flower bud appears	4	21	Carbaryl 50% W.P. + Sulphur 80% W.P.	— —	2,000 1,250	500
17.	Banana	Mosaic, Bunchy top	Aphids	When the diseases are noticed.	2	15	Malathion 50% E.C.	1,250	—	500

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- Termite Control
- Fumigation
- Disinfestation
- Sterlisation
- Marine Pest Control
- Vector Control
- Carpet Treatment
- Weed Control
- Laboratory and Consultancy Services

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Reg. Office: Yusuf Building, M. G. Road, Bombay—400 023
Phone: 251546/94

Branches all over India.

Chemical crop protection in Indian agriculture

Concluded from page 1

The use patterns of pesticides in India

A study of the market profile reveals interesting information on the use patterns of pesticides in Indian agriculture. The value of pesticides used in 1980 is estimated at Rs 200 crores. Insecticides play a dominant role in the pesticides group with 74 per cent share in the market followed by fungicides with 11 per cent of the market. There is a welcome sign in the recent awareness to use more herbinides. This is mainly due to increased labour costs in manual weeding operations, and for better utilisation of fertilisers and also for efficient weed control provided by modern herbicides. The herbicide market is expected to grow considerably from the present level of eight per cent in the coming years.

In the developed countries, herbicides play a major role with 45 per cent of the market against 35 per cent insecticides, 15 per cent fungicides and 5 per cent other chemicals. Besides, the level of use of pesticides in India per unit crop area is also deplorably low by international standards. The rate of growth in pesticides consumption in India apparently presents a striking rise from 3.2 grams/ha in 1954 to 640 grams/ha in 1980 (230 grams/ha on the basis of total area sown). By contrast, the pesticides consumption in Japan is 10,790 grams, in USA 1,490 grams and in European countries 1,870 grams per hectare. This

Table 1 : Pesticides consumption in India in agriculture and public health programs

(Tonnes)

Year	Agriculture	Public Health	Total
1965	6,654	7,976	14,630
1968	14,098	14,102	28,200
1971	19,935	9,600	29,535
1974	37,523	12,341	49,864
1977	39,880	19,100	58,980
1980	40,534	N.A.	—

N.A. = Not Available

Table : 2 Pesticides market profile—1980 (Agriculture)

Rs. '000

Market segments	Value (Rs.)	Per cent share
Insecticides	1480,000	74
Fungicides	220,000	11
Herbicides	160,000	8
Miticides	40,000	2
Rodenticides/fumigants	80,000	4
Plant hormones	20,000	1
Total :	2000,000	100

Table 3 : Production Capacities of Pesticides in India

Pesticides	Capacity (Tonnes per annum) Licensed	Installed	Letter of Intent
BHC	40900	37900	6000
Carbaryl I	7000	5000	—
D.D.T.	4088	4144	5000
Endosulfan	4000	1200	—
DDVP	276	276	50
Phosalone	1000	—	—
Lindane	100	30	400
Dimethoate	1450	1300	600
Fenitrothion	1600	600	300
Malathion	6200	5300	3500
Methyl demeton	325	240	—
Phorate	450	450	600
Monocrotophos	450	—	1300
Methyl parathion	1850	1850	500
Phosphamidon	836	636	—
Quinalphos	900	700	1000
Phenthoate	600	600	500
Thanite	150	150	—
Nicotine sulphate	40	40	—
Tetradifon	—	18	15
Ethion..	100	—	150
Diazinon	—	—	550
Thiometon	—	—	100
Temephos	25	25	—
Pyrethrum insecticide ..	1200	—	—
Fenthion	200	—	—
Carbofuran	—	—	400
Fenvalerate	—	—	100
Fungicides			
Copper oxychloride	2020	3660	—
Copper sulphate	3000	3000	—
Nickle chloride	300	300	—
Organo mercurials	92	91	—
Zineb	2650	2650	1000
Thiram	400	400	500
Ziram	634	634	—
Ferbamx	25	25	—
Metham sodium	25	25	—
Carbendazim	535	135	—
Sulphur	2000	2040	—
Carboxin	—	—	150
Calixin..	—	—	50
Kitazin	—	—	200
Rodenticides			
Coumafuryl	50	50	—
Zinc phosphide	1166	876	—
Weedicides and plant growth regulants			
2, 4-D	2,537.8	1,397.8	—
Dalapon	150	—	200
Paraquat	500	—	300
T.C.A.	50	—	—
M.C.P.A.	100	—	—
M.C.P.B.	50	—	—
Propanil) Nitrofan)	1500	1500	50
Fluchloralin	200		—
Diuron	200	200	100
Alpha napthyl acetic acid ..	20	5	—
Cycocel	200	100	100
Butachlor	—	—	800
Fumigants			
Aluminium phosphide ..	1330	1380	—
E.D.B	258	258	—
M.B.	300	300	—
Grand total	97,140.8	78,315.8	21,215

Source : Modified from Pesticides Information October—December 1980.

indicates that serious efforts are needed to intensify proper chemical pesticide use not only in areas where pesticides are presently employed but also in the new expansions.

Growth of pesticides industry in India

The growth of pesticides industry in India over the past 30 years is commendable. India, today, is the largest manufacturer of pesticides in the South Asian and African countries with the exception of Japan. The basic manufacture of pesticides commenced in India in 1952 with the setting up of a plant for the manufacture of BHC. This was soon followed by DDT and subsequently by a large number of products to meet the growing demands both in agriculture and in public health areas.

The number of pesticide products manufactured in India at present totals to about 40 comprising varied type of chemicals such as insecticides, acaricides, nematicides, fungicides, rodenticides, weedicides, plant growth regulators and fumigants. The total installed capacity amounts to over 78,000 tonnes within the licensed capacity of about 97,000 tonnes. Additional Letters of Intent have been issued for another 25,000 tonnes.

Insecticides like BHC, DDT and malathion which form a major share of the installed capacity are largely used in public health programmes. There is a growing demand for newer pesticides for their efficiency in pest control and appreciable cost benefit returns. In the field of crop protection, there will always be a need for increasingly sophisticated products to combat the complicated nature of pest incidences confronting the agriculturists in the changing crop environment. The revolutionary trend in this direction is the present discovery of a new group of insecticides, the synthetic pyrethroids which provide dramatic control of pests with minimum quantities of even 10-50 grammes against 1000 grammes per hectare of most of the currently used insecticides.

The number of pesticides used in India is very low in comparison to the USA and other countries. The total number of pesticides products registered is only around 119 and in the number of formulation used in over 150. Out of these limited number of registered products, some suffer from obsolescence and are hardly used.

The crop protection chemicals are widely diversified for specific uses as will be evident from the list of plant protection chemicals used in the developed countries. Today, in the Federal Republic of Germany, the list of plant protection chemicals available contains the names of some 1,600 formulated products, made from some 300 active ingredients. In the United States, there are some 35,000 different labels for products from a large number of manufacturers and formulators, made from 1,400 or more active ingredients.

This indicates that there is a wide scope for development of newer pesticides to meet the requirements of efficient plant protection. It is all the more necessary for a country like India where the pestilence is more acute due to sub-tropical/tropical and humid climate which is conducive to rapid multiplication of pests. In India, there are more than 200 major insect pests, 100 plant diseases and hundreds of weeds and other pests such as rodents, harmful birds and the like which warrants greater crop protection efforts. The future success rests with successful development of new products to keep pace with the new requirements in the changing crop environment.

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Manufacturers of Quality Pesticides

COROBAN COROPHOS

NFT—A crop production technique

By DINESH BALSAVER

THE Nutrient Film Technique (NFT) is a method of growing crops in a thin film of water containing plant nutrients. This technique was developed by Dr Allen Cooper in the UK., and is used today in several countries for growing vegetables and flowers in glass-houses.

Over the last four years, National Organic Chemical Industries Ltd (NOCIL), has devoted considerable time and effort to modify the technique so that it could be used by our farmers to grow field crops under our conditions of farming. The modifications have been of such a fundamental nature that the term NFT could, indeed, be used in India to mean NOCIL Film Technique. This article describes in brief this technique of crop production, outlines its advantages and attempts to look into the future as far as large scale applications of this technique is concerned.

How does it work?

Essentially, the NOCIL Film Technique refers to water management. It involves "encouraging" plants to send their roots into furrows lined with plastic film, referred to as gullies in this article. These gullies hold water and plant nutrients. The following illustration, which gives a cross section, may help in understanding this point.

The 'U' shaped furrows in the figures are the gullies holding water and nutrients. A capillary matting in the form of a narrow strip of sack cloth (about 2" wide and 4" long) is used for "encouraging" roots towards the gulley. One end of the capillary matting is dipped in the nutrient solution in the gulley. The plant is placed on the capillary matting and held there with a thin layer of soil. A small barrier of plastic film is placed below the capillary matting to prevent water getting into the soil via the capillary matting. The roots follow the wet capillary matting into the gulley. Once in the gulley, the roots are able to draw all the nutrients and water required by the plant for healthy growth, from the gulley. Some of the roots go into the soil as shown in the illustration. These help to anchor the plant.

An NFT system consists of one tank (capacity 4,000 to 6,000 litres of water) and several gullies laid in the soil at right angles to the tank. The tank is made of soil compacted and lined with a plastic film. It is a couple of feet above the level of the gullies so that water can flow by gravity into the gullies. The gullies themselves are small furrows about 2½ inches deep, dug into levelled land and lined with a plastic film. From the source of water (well or river or canal) water is pumped into the tank. Standard fertiliser grades mixed in a balanced form to provide all the nutrients, including micronutrients required by plants, are added to the tank. A small plastic tube is used to siphon water from the tank into the gullies. As plants draw water from the gullies it is replenished from the tank. This, in essence, is how the system works.

Advantages of NFT

The advantages of NFT are as follows :

1. It facilitates efficient use of water and nutrients, two scarce inputs in our country. There is no loss of water due to percolation. In NOCIL's rural development work at Chitrakoot (a drought-prone area in Madhya Pradesh) and Uruli Kanchan (Maharashtra), excellent plant yields have been obtained with one-fourth the quantity of water normally required.

2. All the nutrients added are directly 'available' to plants. In normal agriculture, part of the fertiliser added is either physically leached away from the root zone or gets chemically fixed in the soil and becomes 'unavailable' to the plant roots. There is no such problem in NFT, since the nutrients are all in the gulley and are readily available to the roots.

3. Since plants are able to get as much water and nutrients as they need, they are able to achieve their full genetic potential. It is, therefore, possible to get very high yields. In Chitrakoot, for example, yields of 250 to 300 tonnes per acre of hybrid napier grass (for use as fodder) have been obtained. As against this, the annual yield in soil is about 80 to 100 tonnes per acre.

4. In NFT, soil fertility is immaterial and it is possible to get good yields from poor soils since all the nutrition is provided to plants through the gullies and soil is used merely to anchor the plants.

5. It is possible to add 'systemic' pesticides (i.e., pesticides which are absorbed by plants and translocated throughout the plant 'systems') to the water in the tank thus eliminating the need to spray pesticides. It is also possible to get good results with a fraction of the normal dosage because whatever is added is efficiently absorbed by the plants through the gullies.

Economics of NFT

NOCIL has been concentrating on growing hybrid

Mr Balsaver is marketing manager, National Organic Chemical Industries Ltd, Bombay.

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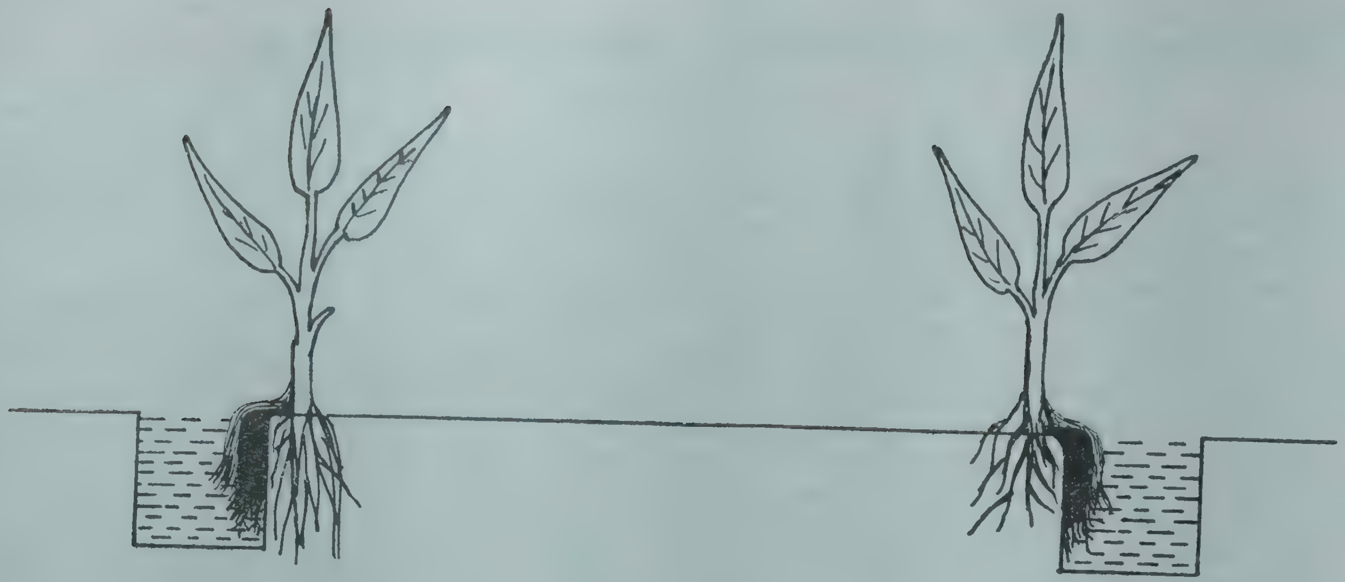


Fig. 1

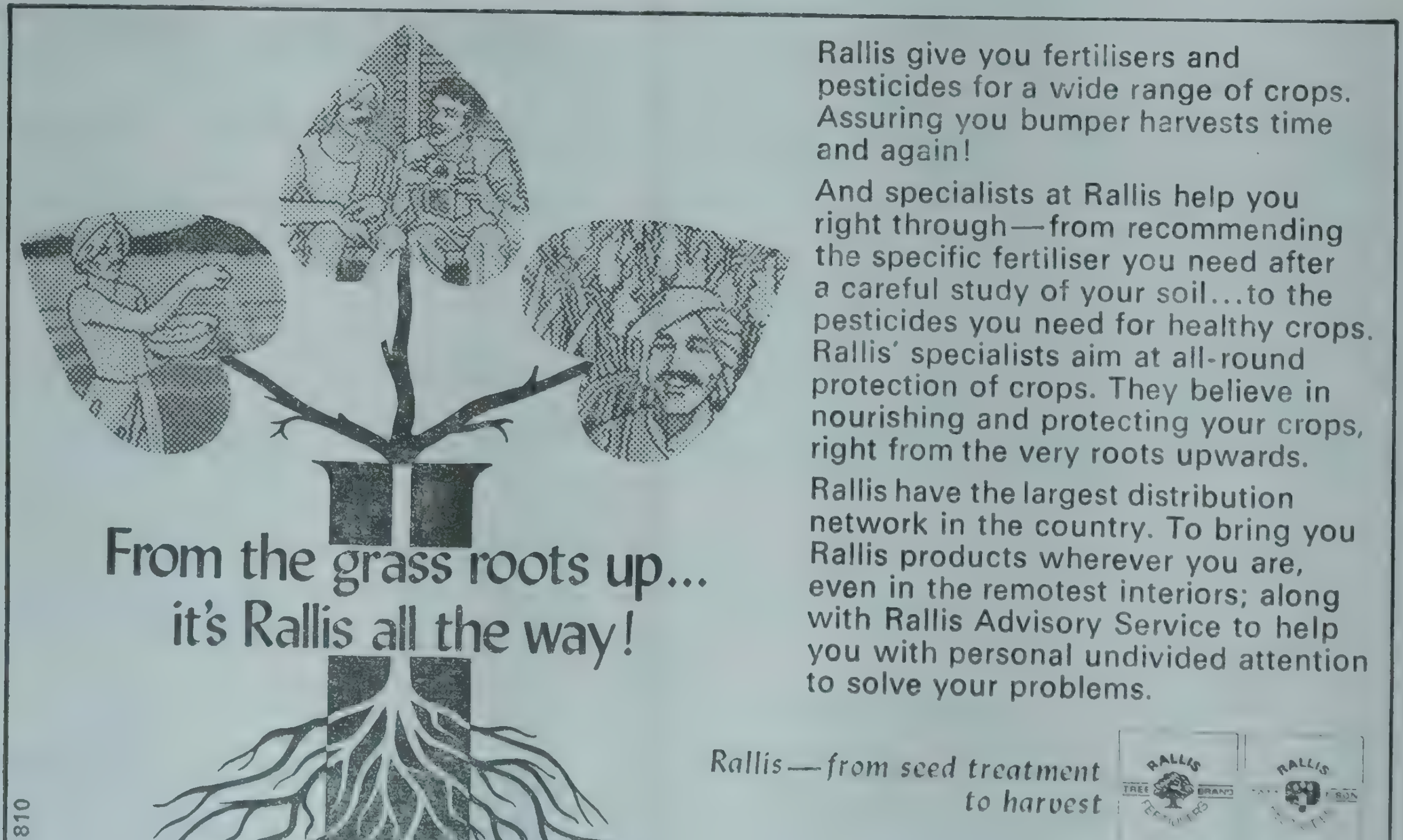
napier grass because of the importance of growing fodder if our cattle wealth is to be improved. The results show that yields of hybrid napier grass grown under NFT is such that investment in plastics and the nutrients are not only recovered in one year but adequate surpluses are built to lift a family above the poverty-line using a 10 guntha installation of NFT.

It is possible to grow almost any crop in this system. Work is in progress to grow different kinds of vegetables, pulses, edible oil plants and even fruit trees by this technique of crop production.

Significance of NFT to agriculture

Due to centuries of cultivation and our tropical climate under which organic matter gets burnt rapidly, our soils are generally poor in organic matter. Such soils do not encourage healthy root growth and we say these soils are not 'responsive' to fertiliser application. NFT offers us an opportunity to overcome this handicap at one stroke and get the best o yields from the most unresponsive soils.

Perhaps the biggest virtu of NFT lies in the possibility of simplifying the technique for adoption by small and marginal farmers. If the infrastructure to supply water plastic film and nutrients i established, a marginal farmer can run an NFT system without much difficulty. NOCIL's experience in Chitrakoot shows that with initia training in laying the gullies and installing a tank, our farmers can readily grasp the essentials of the system and run it without much difficulty. NOCIL is proposing to install this system for 200 families in the Chitrakoot area. These families are, perhaps, the most backward among our farming community. If they show that the system can be successfully operated, the possibilities of transferring this experience throughout India becomes immediately practical.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Rallis—from seed treatment to harvest

RALLIS INDIA LTD. Fertilisers & Pesticides Division.

STATISTICS

By Commerce Research Bureau

India's imports of pesticides

Quantity : Tonnes
Value : '000 Rs

Item	1976-77		1977-78		1978-79		1979-80		1980-81	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Aldrin	44.3	1,273	129	3,894	98	3,519	177	6,044	44	1,806
2. Chlordane	—	—	26	527	21	392	12	269	14	292
3. Carbofuran	—	—	30	2,777	—	—	—	—	—	—
4. Captafol	—	—	31	1.074	—	—	—	—	—	—
5. Dulapon	—	—	328	4,038	76	1,026	—	—	—	—
6. Dursban	—	—	17	1,463	—	—	—	—	11	1,019
7. Carbaryl	—	—	215	4,778	328	9,043	286	11,054	16	476
8 DDT	2,105.0	19.123	4,478	46,341	4,618	40.325	2,812	5,964	1,953	25,033
9. Endosulfan	—	—	859	34,128	506	22,955	820	48,025	411	24,098
10. Dicofol	—	—	52	1,574	92	2.668	28	1,821	10	338
11. Diazinon	—	—	5	263	27	1,603	11	510	2	123
12. Disulfaton	—	—	2	48	—	—	—	—	—	—
13. Diuron	—	—	8	292	12	543	11	441	—	—
14. Ethylene dibromide	34.3	0.495	203	1,142	10	85	25	219	—	—
15. Atrazine	—	—	125	354	34	2,427	16	390	30	959
16. Lindane	11.5	0.706	30	1,236	25	1,163	5	244	1	88
17. Basalin	—	—	10	608	—	—	—	—	—	—
18. Phenthoate	—	—	93	5,087	217	7,250	54	2,293	50	2,165
19. Ethion	—	—	29	1,089	56	2,294	19	754	—	—
20. Phorate	—	—	47	1,712	173	4,377	39	1,505	15	538
21. Phosalone	—	—	148	6,024	282	11,302	9	383	37	1,806
22. Toxaphene	—	—	2,000	4,777	184	1,839	12	91	5	78
23. Vitavax	—	—	5	1,275	—	—	—	—	—	—
24. Simazine	—	—	2	75	—	—	5	178	—	—
25. Trichlorfon	—	—	2	64	—	—	—	—	—	—
26. Tribunil	—	—	81	3,930	—	—	—	—	—	—
27. Hinosan	—	—	20	1,461	10	844	20	1,526	—	—
28. Machete	—	—	62	2,213	—	—	—	—	—	—
29. Sodium cyanide	—	—	1,722	24,279	1,332	11.265	1,323	21.646	739	8,287
30 Monocrotophos	—	—	87	8,857	25	1,174	75	5,139	192	10,800
31. Tetradifon	—	—	8	572	9	713	62	1,573	7	670
32. Thiometon	—	—	108	4,523	8	555	15	1,120	3	165
33. Paraquat	—	—	107	4,796	220	7,528	7	296	2	65
34. Heptachlor	4.5	0.09	16	409	21	431	N.A.	60	68	1,324
35. Tok	—	—	11	320	—	—	—	—	—	—
36. Fungicides	—	—	1	26	—	—	—	—	—	—
37. Pesticides n.e.s.	—	—	747	20,771	2,112	39,049	675	25,818	186	12,536
38. Dimethoate	—	—	—	—	9	226	1	46	5	151
39. D.D.V.P.	—	—	—	—	2	55	14	295	—	—
40. Maleic hydrazide	—	—	—	—	41	215	—	—	—	—
41. Wettable sulphur	—	—	—	—	61	307	10	72	—	—
42. Zineb	—	—	—	—	5	49	—	—	—	—
43. Captan	—	—	—	—	2	51	2	43	—	—
44. Methyl bromide	—	—	—	—	12	210	2	47	3	329
45. Thanite	—	—	—	—	50	1,026	—	—	—	—
46. Fenitrothion	—	—	—	—	10	521	—	—	—	—
47. Rutachlor	—	—	—	—	295	9,718	—	—	—	—
48. Thiram	—	—	—	—	15	148	—	—	26	481
49. Fluchloralin	—	—	—	—	—	—	11	543	—	—
50. B.H.C.	1.0	0.001	—	—	—	—	—	—	—	—
51. Ethylene dichloride sodium pentachlorophonate	34.3	0.495	—	—	—	—	—	—	—	—
52. Other weedicides	Neg.	Neg.	—	—	—	—	—	—	—	—
53. DDT perp.	2,515.2	20.21	—	—	—	—	—	—	—	—
54. Dieldrin	—	—	—	—	—	—	—	—	—	—
55. Eldrin	36.8	2.251	—	—	—	—	—	—	—	—
46. Other pesticides	1,353.6	60.402	—	—	—	—	—	—	—	—

SOURCE: Pesticides Association of India, **Pesticides Information**, various issues

Reg. No. MH-BY /South-3
Licence No. 5
Reg. No. WB / CC-24

India's exports of pesticides : 1974-75 to 1979-80

(In '000 Rs)

Item	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Nicotine alkaloids	842.4	352.9	368.0	48.9	95.8	—
Nicotine sulphate	—	—	—	7,001.8	12,015.6	4,547.0
Salt and other derivatives of nicotine	4,107.7	2,204.8	4,029.3	691.0	62.2	—
Sulphur excluding sublimed	858.4	—	615.1	498.2	—	—
BHC dust	245.5	4.4	160.6	93.6	23.0	—
D.D.T.	—	—	—	26.3	9.8	—
Aldrin	30.4	—	75.9	103.1	6.1	—
Aluminium phosphide	585.8	3,670.4	11,090.4	4,854.4	6,580.5	5,172.0
D.D.T. preparations	—	—	—	22.5	143.3	—
Fumigants n.e.s.	—	—	147.0	—	—	—
Lindane	485.9	181.5	383.0	40.6	—	—
Insecticides others	636.6	728.3	561.1	2,457.8	3,018.3	2,867.0
Pesticides n.e.s.	239.3	2,016.0	3,124.4	1,035.5	6,347.8	—
Fungicides (maneb)	—	—	—	—	213.8	—
Zineb	—	—	—	—	215.8	—
Other fungicides	244.3	—	—	—	54.0	—
Chloromethyl phenoxy acetic acid	—	—	299.5	—	5.5	—
Weedicides and weed killing agents others	774.3	1,791.2	238.6	702.3	757.3	—
Zinc phosphides	2,766.6	2,665.8	213.0	925.6	3,293.6	—
Phosphides other	—	162.7	—	158.2	144.5	2,287.2
Copper oxychloride excluding natural	288.6	—	—	—	—	—
Total	12,105.8	13,778.0	21,305.9	18,659.8	32,986.9	14,873.2

SOURCE : Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council, Bombay, various issues.

India : Trends in production an consumption of pesticides (Technical)

(Tonnes)

Year	Production	Consump-tion
1955-56	2,303	2,350
1960-61	8,984	8,620
1965-66	14,137	14,630
1966-67	15,365	17,137
1967-68	16,078	20,900
1968-69	18,647	19,580
1969-70	26,000	20,650
1973-74	32,652	45,000
1974-75	35,247	49,864
1975-76	34,624	58,314
1976-77	35,811	36,713
1977-78	42,595	39,880
1978-79	52,531	54,020
1979-80	50,294	—
1980-81 (Up to December 1980)	32,082	—

Note : (—) = Not available

SOURCE : CRB Data System

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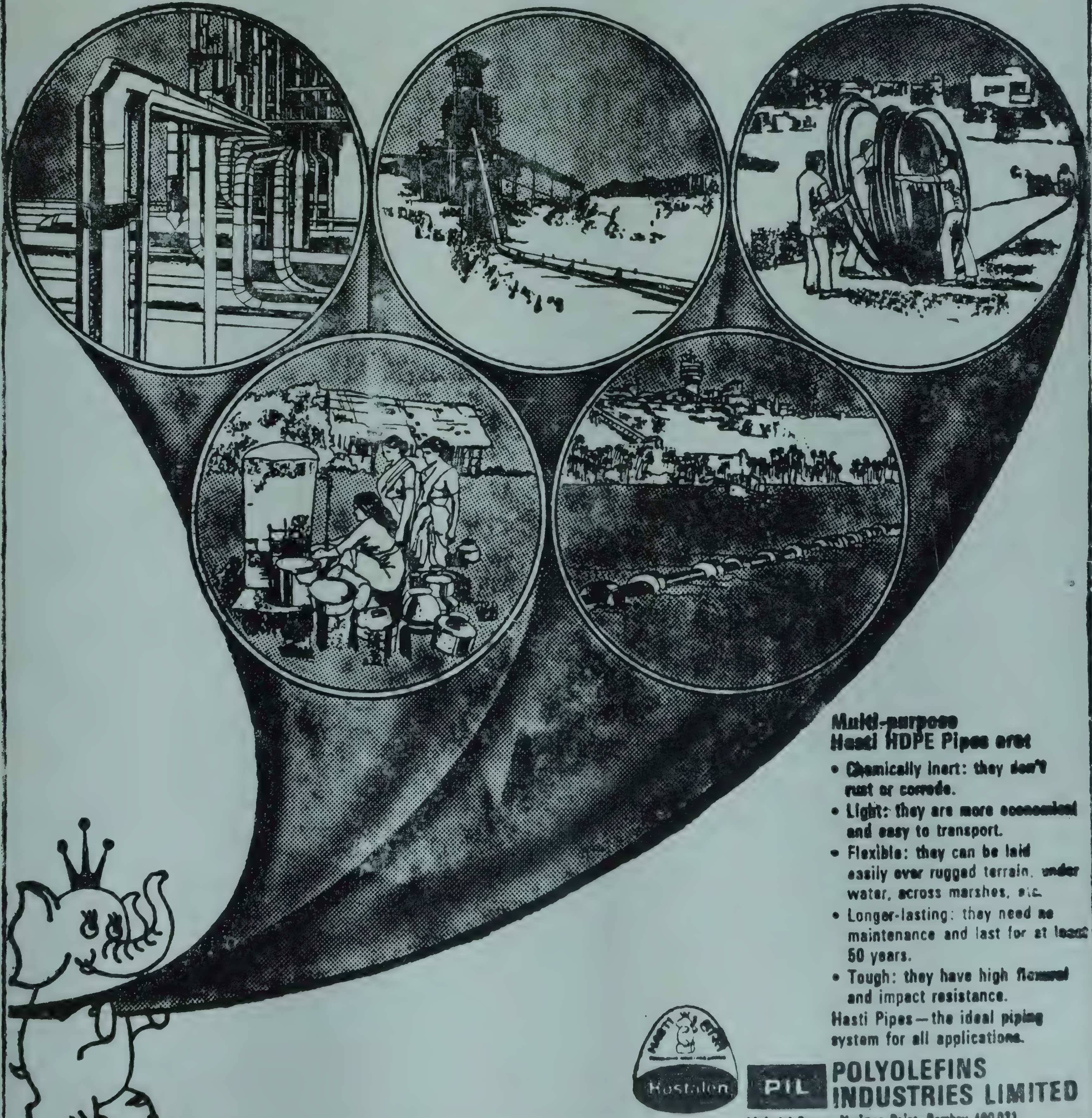

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Special Reports

Wheat imports: To strengthen supply side?

From ARVIND BHANDARI

NEW DELHI

THE Prime Minister, Mrs Indira Gandhi, declared at a press conference here that the governments decisions to import wheat, sugar and edible oils were the beginning of an anti-inflationary exercise.

Earlier reports had mentioned that the quantity of wheat to be imported from the United States might range between 1.5 to 2 million tonnes. The Prime Minister discounted these reports and did not volunteer any information beyond referring to an 'unspecified quantity". Most economic observers have criticised the Government's decision to import wheat. Leaving aside other considerations for the moment, even the arithmetic of foodgrain buffer stocks makes the decision to import wheat one of borderline wisdom, if not totally wrong.

Going by the figure mentioned by Mrs Gandhi herself, foodgrain buffer stocks stood at 13.7 million tonnes on July 1. One effect of greater wheat going into the private channels has been that the offtake from the public distribution system has fallen. It has been 4.6 million tonnes during the first five months of this year as against 6.5 million tonnes in the corresponding period last year. If the rate established in the first five months is any indication, the offtake in the remaining seven months of the current year should not exceed 6 to 6.5 million tonnes. On the other hand, since rice procurement in the wake of the last *kharif* season was 5 million tonnes, it could, in view of helpful behaviour of the monsoon and lessons learnt from the recent procurement imbroglio, be expected to be substantially more than five million tonnes after the present *kharif*. This means that there is no danger of depletion in the country's food buffers below the level of 13.7 million tonnes mentioned by the Prime Minister. And the ideal level of buffer stock for the country is said to be 15 million tonnes.

The upshot is that the knee-jerk reaction of importing foodgrains could have been avoided. Mrs Gandhi herself said in her prepared statement: "I have no doubt that, in terms of availability of foodgrains, our situation is very comfortable."

For a country which has taken pride in having acquired self-sufficiency in foodgrains, imports of wheat cannot but dim its political image on the international plane. In fact, it is also acutely embarrassing for the Congress (I) Government, which explains the puerile attempts of Krishi Bhavan to hide the facts until the Prime Minister herself let the cat out of the bag. Furthermore, the price to be paid for the purchased wheat is reported to be considerably higher than the indigenous price. It is also being questioned whether it is proper for the Government to support the foreign farmers at such a huge cost.

Since the decision to import wheat is being flaunted as an anti-inflatonary move, it is worth considering whether it can stand closer scrutiny. The additional foodgrains that would become available following imports are unlikely to result in any enhancement of the individual quota supplied through the public distribution system. Neither does the Government release foodgrains in the market through open market operations in order to bring down their prices. All that would happen is that the size of the buffer stocks would become a little bigger. Thus the effectiveness of imports in bringing down foodgrains prices would be limited only to the psychological effect these would have on the private trade. Surely the deflationary result of such a psychological effect cannot be more than marginal.

Bombay spot exchange rates of currencies as on 13-7-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.70	9.90
Austria	A. Schilling	190.00	197.00
Belgium	B. Franc	446	455
Canada	C. $	13.35	13.81
Denmark	D. Kroner	85.50	86.90
France	Franc	65.20	66.30
Hong Kong	H.K. $	63.00	64.90
Italy	Lira	13,620	13,820
Japan	Yen	2530	2580
Malaysia	M. $	26.10	26.90
Netherlands	Guilder	30.30	30.80
Norway	N. Kroner	68.10	69.30
Singapore	S. $	23.90	24.70
Sweden	S. Kronor	57.70	58.80
Switzerland	S. Franc	23.20	23 70
UK	£	5.9425	5.9930
USA	$	11.22	11.34
West Germany	D.M.	27.20	27.70

To quote Mrs Gandhi: "When there is availability that is the time to build up substantial stocks so that we do not have to take chances and are not at the mercy of traders and hoarders withdrawing supplies from the market. This decision was taken to avoid any sharp increase in foodgrains prices, and as an instrument of control of the economy. This wheat can be released as and when it is necessary to combat pressure on prices and the machination of traders and hoarders." But from the foregoing argument it is clear that, following imports, the private trade will neither disgorge stocks substantially nor will foodgrain prices come down meaningfully unless the Government uses the additional quantities available to either supply more foodgrains through the ration shops or release foodgrains in the open market.

Another question that comes to the fore from Mrs Gandhi's statement is that if the Government admits there is hoarding of foodgrains, why no action is being taken against the hoarders, whether they be farmers or traders. Are the various preventive detention measures added to the Government's legal armoury mere decorative devices? Is the Government afraid to do its duty because of political reasons?

It is a measure of how awe-stricken the journalists were by Mrs Gandhi that during the press conference she was able to depict foodgrains imports as an act of expediency whereas actually they are a symbol of gross economic mismanagement. It is ironical that foodgrains are being imported at a time when their production has been a record 133 million tonnes. The Government should have realised that the private trade would be able to corner a substantial part of the wheat by offering prices considerably higher than the procurement price. It should, therefore, have arranged to support the procurement drive by banning inter-state movement of wheat or imposing a levy or both. By the time Krishi Bhavan woke up to the serious lag in procurement the horse had bolted. Last-minute efforts in Punjab and Haryana to unofficially ban movement of wheat and also to forcibly extract stocks from farmers with the help of the police proved both hamhanded and late. If anybody is responsible for the bungling, it is the Agriculture Minister and the Chief Ministers of Punjab & Haryana. Anyhow, the result is that food procurement has not been even seven million tonnes as against a target of 9.5 million tonnes. Interestingly, the gap left in the procurement would perhaps be the quantity the Government plans to import.

Regarding edible oils, Mrs Gandhi announced that 5 lakh tonnes are to be imported in the next four or five months. But regarding sugar, she did not, as in the case of wheat, indicate the quantity. Sugar also presents the ironical case of imports being made despite "a comfortable" production of 52 lakh tonnes compared to only 38.6 lakh tonnes last year.

In the case of sugar also it is unclear how the imported quantities are to be used. Would the ration card sugar quota be increased? Would the Government itself enter the market? Or is the intention to merely build a buffer stock and use it, as in the case of wheat, as a psychological instrument against the trader. Since the wheat and sugar imports are probably meant as psychological moves, it is all the more necessary that the quantities to be acquired should be publicised. The Government's unwillingness to disclose the quantities does not, therefore, stand to reason.

Mrs Gandhi sought to make out during the press conference that inflation was being controlled. To substantiate this claim she stated that the annual rate of inflation came down from 21.4 per cent in 1979-80 to 16.4 per cent 1980-81. This decline in the rate of inflation has continued. Up to June 20 this year the annual rate of inflation has come down by over 10 per cent compared to last year. But serious reservations make the Prime Minister's assertion misleading. Firstly, she is talking in terms of "rate of inflation" and it is commonsensical that this rate of increase would decline as the base over which it is calculated rises progressively. Secondly, the Prime Minister should have candidly conceded that the year with which she is comparing the present-day rate of inflation was a drought year. Thirdly, to take about, as she did, India having the lowest prices in the world is to rub an inflation-rocked people the wrong way. Does the Prime Minister not know that India also has the lowest incomes?

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on July 10, 1981 over		
		July 10, 1981	July 3, 1981	June 12, 1981	July 12, 1980	July 3, 1981	June 12, 1981	July 12, 1980
Rice	Average	3.50	3.50	3.50	2.80	—	—	25.0
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.20	2.20	2.20	2.00	—	—	10.0
Bajra	Average	2.20	2.20	2.20	2.00	—	—	10.0
Gram dal	Average	6.20	6.20	6.20	6.00	—	—	3.3
Tur dal	Average	6.50	6.50	6.50	5.50	—	—	18.2
Potatoes	Average	2.40	2.40	2.25	2.50	—	6.7	—4.0
Onions	Average	2.00	1.60	1.00	1.00	25.0	100.0	100.0
Milk per litre	Buffalo	5.00	5.60	5.00	4.25	—10.7	—	17.6
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre	—	1.66	1.51	1.51	1.39	9.9	9.9	19.4
Bread (400 grams)	—	1.55	1.55	1.55	1.25	—	—	24.0
Sugar	Average	6.70	7.00	7.60	7.60	—4.3	—11.8	—11.8
Gur	Average	6.00	6.00	6.00	6.00	—	—	—
Groundnut oil	Average	15.00	14.00	14.00	11.80	7.1	7.1	27.1
Vanaspati	Average	16.00	15.00	15.00	—	6.7	6.7	—
Toilet soap	—	1.90	1.90	1.90	1.90	—	—	—
Exercise book (200 pages)	—	2.50	2.50	2.50	—	—	—	—

Many fear that the petroleum price hike will send fresh inflationary waves through the economy. There are stray reports about intentions to revise upward prices of some strategic materials like cement and steel. The Government has decided to release one instalment of dearness allowance of government employees. Pious intention about curbing non-development expenditure are also being mentioned. These can carry no conviction in the absence of visible action, as in the last budget also the Government made a similar resolve only to forget it even before the ink had dried on the Finance Minister's speech. Also audible is some talk about reducing subsidies. This also carries no conviction because the proposal would require a tremendous amount of political will. Demonetisation of Rs 100 notes was mentioned at one stage and rightly rejected as an absurd proposal. It is noteworthy that there is a realisation that control of inflation requires both supply and demand management.

The Prime Minister, during the press conference, claimed an improvement in industrial production. The increase in industrial production in 1980-81 was only 3.6 per cent as against a target of 8 per cent. It also needs to be realised that the improvement was over a truncated base as the previous year had shown a negative growth. The improvement in the infrastructure should also be somewhat discounted because the comparison is with the earlier drought period. Nonetheless, the improvement is welcome and it is to be hoped that it would be sustained. According to figures given by Mrs Gandhi, the generation of power in the second half of 1980-81 was 13 per cent higher over the corresponding period of the previous year. Coal production exceeded 118 million tonnes last year. Railway freight movement was also augmented, though it remained below the target. During the first quarter of the current financial year power generation increased by 19.2 per cent, coal production by 6.2 per cent, steel production by 20 per cent, cement production by 20 per cent and the railway goods traffic by 14 per cent over the corresponding quarter of the previous year. The production of 29 major industries increased by 19 per cent through April-May 1981 over the same period a year ago. The Prime Minister did not clarify whether these various improvements were in quantum or value. If it is the latter, part of the statistical improvement is ascribable to inflation.

FERTILISERS

Western region leads

BOMBAY

CAPACITY utilisation by the fertiliser factories in the western region, comprising Maharashtra, Gujarat, Madhya Pradesh and Goa, has improved to 85 per cent last year compared to that in the rest of the country, according to Mr R. Kapoor, chairman, Fertiliser Association of India, western region.

Addressing the 21st annual general meeting of the western regional committee of FAI, Mr Kapoor said that in spite of increasing fertiliser capacity in the country by 7 lakh tonnes last year, the industry could not maintain its production tempo owing to power cuts and non-availability of essential raw materials. Production in terms of nitrogen and phosphate, which was 29.87 lakh tonnes during 1979-80, increased only marginally last year. However, factories in western region gave better performance during the year and shared over 27 per

Shortages and surpluses

Urea

Sales of fertilisers affected in Maharashtra due to inadequate availability of urea.

Coal

As many as 81 pairs of trains cancelled by Western Railway due to coal shortage.

Cement

Over 20,000 construction workers became jobless in Pune as building activity came to a standstill there due to acute scarcity of cement.

As I see it

Economics and politics of smaller districts

SEVERAL districts in the country have been partitioned recently to create new administrative districts. In Maharashtra two new districts have been carved out after the 1981 census — Jalna from Aurangabad and Sindhudurg from Ratnagiri. In Uttar Pradesh Kanpur (rural) has been created. The latest is the bifurcation of Twentyfour Parganas in West Bengal into North Twentyfour Parganas (3,897.10 sq kilometres) and South Twentyfour Parganas (5,502.40 sq kilometres). The most spectacular decision in recent times was taken by the Government of Bihar which by one stroke of pen increased the number of districts from 17 to 31 a few years ago. After the 1981 census two more districts have been created to push the total of districts to 33. In the country as a whole the number of districts went up from 356 in March 1, 1971 to 418 in July 1981 (412 on March 1. 1981).

The rise in the number of districts has an immediate and distinct bearing upon the growth of administrative expenditure in the state concerned. For example, the bifurcation of Twentyfour Parganas would involve an additional expenditure of rupees twentyfive crores — mostly in constructing buildings for the offices and residence of the district magistrate, district judge, superintendent of police and other district-level functionaries.

No doubt an unstated motivation behind the so-called "upgradation" of administration is to provide for a larger number of posts with higher emoluments in the State Government. Thus, although West Bengal is today one-third of the size of Bengal in 1947 before partition, it has a very much larger number of officers of the grade of Commissioners than in 1947. The same is the case in Bihar and many other states. Now in virtually all states the departments of the government have come to be headed by Commissioner-level officers instead of secretary-level officers.

Even if the need for increasing the salary of the government officers is conceded it is doubtful if this underhand way of doing it is to be preferred to a straightforward decision of revising the payscales upwards. A consequence of this devious method of enhancing salaries of top government servants has been the relative downgrading of the judiciary in terms of financial rewards. Whereas no IAS officer was expected to draw a salary higher than that of a High Court judge the backdoor manipulations now place the chief secretary to a state government on a higher salary grade than a High Court judge.

The proliferation of high-grade officers would have been still justifiable if it had led to their greater accessibility to the people. It is in the nature of the bureaucracy to imitate the behaviour pattern of the higher level and the culture of inaccessibility practised by the British for their own reasons (lack of knowledge of the language and culture of the people being an important one) continues unabated — nay, is glorified — even after more than three decades of their leaving this country. The fact that the political complexion of the party in power in a State has not made much of a difference in reducing the aloofness and inaccessibility of the bureaucracy only underlines the extraordinary ineffectiveness of politics to have any impact on the imperially-patterned administrative system, in which a foreign element (an IAS or IPS officer belonging to a different linguistic group or State) is expected to keep the people down (soon to be helped by judges to be imposed from other States, if the effort of the Central Government to bring the judges under its administrative control in utter violation of the constitution succeeds). The potentiality of a smaller district to make administration more responsive to the public need that a smaller district contains has thus remained largely unrealised in the smaller districts created earlier and is likely to remain so in the new ones as well.

Subhash Chandra Sarker

cent of the national production of fertilisers.

Mr Kapoor said that the increase in national consumption of fertiliser at 6.5 per cent last year was insignificant compared to 20 to 25 per cent increase during 1976-77 to 1978-79. Rise in prices of fertiliser since 1980 was largely responsible for this, and Mr Kapoor added that inadequate monsoon in some parts of the country was also one of the reasons for small increase in consumption in the country. Consumption was almost static in Maharashtra, while it was slightly down in Gujarat and, though the increase in Madhya Pradesh was 23.3 per cent, compared with the 1978-79 trend, the rise was hardly 2 per cent. The country handled 1.3 crore tonnes of different fertiliser materials last year and the share of the western region was 27 lakh tonnes.

Referring to the production scene next year, Mr Kapoor said that with the commissioning of two urea plants at Bharuch in Gujarat and Turbhe in Maharashtra, urea capacity in the region would go up by 2,800 tonnes daily. The expansion plan at Kandla was complete and the Surat plant expansion would be over in the next three months.

Mr Duleep Singh, chairman and managing director of Rashtriya Chemicals & Fertilisers Ltd, Trombay was unanimously elected chairman of FAI-WRC for 1981-82.

BUSINESS OPINION

MR H. J. R. B. Salnon, Chairman, Warren Tea Ltd: "There are some hard decisions lying ahead for the Indian tea industry and there is need to take very careful stock of the situation and of the options that lie ahead. The general outlook on the supply demand situation in the international context does not lend much hope to a rise in prices sufficient to combat the inevitable increase in costs with which we will be faced. To a certain extent the effect of increases in the unit cost can be offset by some reductions in expenditure and change of product and marketing mix. However, in the ultimate analysis the increased expenditure from year to year needs to be spread over bigger crops, if we have to earn enough for our development plans. The technological means of achieving such increases are within our capability, but the massive capital input in extension, planting and replanting that will be necessary calls for a fair certainty of a growth in demand, which can only be ensured by deliberate steps to promote consumption of tea generically abroad and more particularly at home.

"With regard to capital outlay on extensions and replanting, the recent revision substantially upwards of the replantation subsidy and the development allowance is a welcome acceptance of this fact by the Government of India.

"In connection with the promotion of increased consumption, I think we should look primarily at the situation at home, where I feel the scope is immense. Apart from being the largest producer of tea in the world, India is also the greatest consumer in volume terms, but the annual per capita figure, at less than half a kilogram per head, is one of the lowest—two-thirds of Pakistan's. When one thinks of India's population, running at over 680 million at the moment, and estimated by some to reach 1,000 million by the turn of the century, a per capita annual increase in consumption of a few ounces per head would reverse completely the current supply consumption imbalance."

MR A. A. Mehta, chairman and managing director, Indian Airlines, addressing 30th annual convention of the Travel Agents Association of India in Colombo, said that while the predominant requirement was an incentive at the destinations, a tourist should also find some human satisfaction, adding "discounted fares can hardly be promotional."

He reminded the travel agents that it would be essential to look for the citizens or residents of this region who could be made to travel to another country purely for a holiday. In this process, we should not confuse ourselves with the tourists coming from other regions with the intention of covering some of the regional sectors as part of their worldwide travel intineraries.

Mr Mehta suggested to the Indian travel agents to formulate a profile of the "South Asian Prospect" who can be persuaded to have a holiday in the neighbouring country and examine "whether the fare discounts would make him something more than a mere prospect, *i.e.*, a tourist." If a sample survey was undertaken among the well-to-do in any of the countries in this region it could be found that the destinations like Europe, UK or USA had topmost billing in the preferences of the potential tourists. Hongkong or Singapore may be running a close second mainly because of their shopping attractions.

The only travel motivations that appear to have scope for development in this region are family relationships and religions, he said. Religious commonality, family ties or old associations could be growth areas for the immediate future. But whether these markets are small. or have been only dormant because of the high cost of travel, is not easy to ascertain without a motivational study.

He assured the travel agents that if the markets are "substantial" but have been curbed only by the high fares and not by visa restrictions or the high hotel rates or other inhibiting factors, he would be happy to consider discounted fares on regional routes in consultation with other operating carriers and Governments.

China's large gold reserves

PEKING

CHINA holds 12.8 million ounces or nearly 400 tonnes of gold reserves, worth about $5.3 billion at present prices. This has been revealed by the Peoples' Bank of China for the first time.

Commentators have noted that the gold reserves of China are slightly more than those of South Africa, the world's largest producer, but only half those of Britain, which stands ninth in the world league of goldholders. China is reportedly the world's fourth or fifth largest gold producer.

The figures have been revealed in response to repeated inquiries made by the International Monetary Fund and the World Bank which China joined a year ago.

China, it is said, has been building up its gold reserves during recent years. The Bank of China is a regular dealer on the international bullion market but, of late, its sales have not been made public.

UTTAR PRADESH

New mineral based projects

LUCKNOW

UNDER its R & D programmes the UP State Mineral Development Corporation has taken up several schemes in collaboration with the State Directorate of Geology for the development of rock phosphate in Lalitpur, tungsten deposits recently found in Almora, and copper-zinc deposits, now under detailed exploration in Pithoragarh district.

Besides these schemes, the Corporation is pursuing the possibility of setting up a project for sponge iron in Lalitpur district based on the availability of low grade iron ore reserves of Girar.

Prospects for development of new dolomite and limestone deposits in Almora and pyrophyllite deposit of Jhansi and Lalitpur districts are also under close examination.

On the basis of the project profiles prepared, a private sector undertaking M/s ARC Cements, is setting up a mini cement plant in Dehra Dun for producing 150 to 200 tonnes of portland cement per day. Another mini cement plant is proposed jointly by the UP Cement Corporation and Garhwal Mandal Vikas Nigam. Both these plants would draw their raw material from the Corporation's Lambidhar limestone mine. Thus, the Corporation envisages bringing up of an additional investment of about Rs 50 crores in Dehra Dun region based on the project profiles prepared by it.

Since its establishment in 1974, the corporation has commenced development of Lambidhar limestone mine in Dehra Dun district, of Bari dolomites, near Obra, in Mirzapur district, of Bhalua limestone mine, near Obra, in Mirzapur district, of Ningha limestone mine, near Obra in Mirzapur district, and of Rajahuan bauxite mine, near Manikpur, in Banda district. It is also establishing a calcium carbide plant with a capacity of 21,000 tonnes per annum through its subsidiary UP State Carbide & Chemicals Ltd. Besides, it has undertaken contractual diamond drilling operations operating for the Pyrites, Phosphates and Chemicals Ltd and the UP State Cement Corporation.

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71 = 100)

	During the week ended				Percentage variation			
	June 20 1981	June 13 1981	May 23 1981	June 21 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	275.3	274.3	273.2	249.1	0.4	0 8	10.5	36.6
Primary articles	259.0	257.2	256.5	228 2	0.7	1.0	13.5	33.2
Fuel, power, lubricants etc.	400.3	400.3	400.3	352.8	—	—	13.5	57.0
All commodities	279.1	277.8	277.0	249.2	0.5	0.8	12.0	37.4

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	June 26 1981	June 19 1981	May 29 1981	June 27 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) ..	57,810(a)	57,637	56,815	48,877(a)	0.3	1.8	18.3	35.9
Bank credit	26,294	26,271	25,952	22,068	0 1	1.3	19.1	33.6
Aggregate deposits ..	39,927	39,512	38,915	33,377	1 1	2 6	19.6	39.3
Foreign exchange reserves(a)	4,856	4,890	5,024	5,315	—0.7	—3.3	—8.6	—14.6

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(b) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	May. 1981	144.6 (a)	146.6 (a)	—1.4	10.5
Exports	Rs. crores	Mar. 1981	502	519	—3.3	..
Imports	Rs crores	Mar. 1981	895	953	—6.1	..
Trade balance	Rs crores	Mar. 1981	—393	—434	—	—
Foreign exchange reserves (a)	Rs crores	Jnne 1981	4,856	5,024	—3.3	—7.3
Wholesale price Index ..	1970-71 = 100	May 1981	276.1	274.6	0.5	15.8
Consumer price Index for Industrial workers ..	1960 = 100	Apr. 1981	427	420	1.7	13.9

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71 = 100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71 = 100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70 = 100	134.5	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	153.9	148.6	112.6	4.4	4.6
Exports	Rs crores	6,578	6,459	2,523	1.8	14.7
Imports	Rs crores	11,783	8,908	2,955	32.3	21.8
Trade balance	Rs crores	—5,205	—2,449	—432	32.3	—
Foreign exchange reserves (year-end)	Rs crores	5,186	5,706	764	—9.1	31.5
Money supply (M3) (year-end)	Rs crores	54,384	46,800	17,571	16.2	17.6
Bank credit	Rs crores	25,090*	23,100	7,339	8.6	19.1
Aggregate deposits ..	Rs crores	37,371	32,856	10,139	13.7	20.5
Wholesale prices (average)	1970-71 = 100	256.6	217.1	139.7	18.2	9.1
Consumer price Index for industrial workers (year-end)	1960 = 100	420	373	275	12.6	6.2

Notes: (a) Estimated by Commerce Research Bureau.
(b) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year.
(c) *Data are inclusive of all participation certificates.
(..) = Not available

BOOKS & IDEAS

Role of SBI in rural financing

Agricultural Finance in India

By P. D. Sharma

Bharat Book Depot; Bhagalpur; 1981 *Pages* 237; *Price*: Rs 55.

Economic development of an agrarian economy like India essentially depends on the pace of agricultural growth. In agricultural development rural credit has dynamic role to play. The dynamics of agricultural financing has passed through several phases during the planning era. In this book Dr Sharma focusses attention on various aspects of the rural finance, particularly, in view of the activities of the State Bank of India in this regard. Dr Sharma, in specific terms, seeks to evaluate the role of the SBI and its subsidiaries in the field of farm financing.

The book runs into nine chapters. It opens with discussing the role of agriculture in Indian economy and the significance of agricultural credit—with its dual aspects: quantitative and qualitative. Chapter two poses a bird's eyeview on the relative significance of different rural credit institutions and agencies, like government, co-operatives, money lenders, commercial banks, etc. But, there is a lacuna in the treatment. The period covered is only up to 1970. As such, the whole analysis is of not much relevance to the present day conditions. Chapter 3 is devoted to have a look the experience of agricultural credit of some selected countries to draw some lessons for India. Chapter 4 narrates background and functions of the State Bank of India which is commonly found in many text books on Indian economy. In chapter 5, SBI's methods and extent of financing agriculture have been elucidated. Chapter 6 deals with the branch expansion activities of the SBI aimed at resource mobilisation and resource distribution to uplift rural development. But, here too, Dr Sharma has not gone beyond 1970 statistics. Nonetheless, some of his suggestions are still worth considering, for example (i) deposit mobilisation should be linked with credit disbursement to an increasing extent. (ii) avoidance of delays in advancing farm loans, simplification of loan procedures, use of local language in opening and settling account and full appreciation of the borrowers problem, (iii) preparation of districtwise, annual plans for deposit mobilisation.

In Chapter 7 the author makes a survey of problems confronted by banks in financing agriculture in our country. In Chapter 8 a comparative study of farm credit activities of co-operative, commercial banks and SBI is made. This chapter could have been made more illuminative if more recent data were incorporated in the analysis. Last chapter contains concluding observations of the whole study.

It has been held by the author that in the matter of farm credit the performance of the SBI has been relatively more convincing than other nationalised banks and unless the latter do something seriously, a lopsided. bank-credit pattern cannot be avoided. The author's suggestion for issuing a credit-card to each farmer by the appropriate block authorities and attachment to a specific bank is worth trying.

D. M. Mithani

Improving farm productivity

Farm Mechanisation: Extent and Impact—Commerce Pamphlet—160

A. R. Patel

Published by Commerce Publications, Manek Mahal, 90 *Veer Nariman Road, Bombay*-400 020; *Pages* 42; *Price* Rs 5.

The following are the highlights of the pamphlet:

Adequate and timely supply of power from assured and reliable source is inevitable for performing the desired farm operations uniformly and efficiently. With the use of modern machines operated by diesel or electricity, the horse-power-hours' requirement to perform these important operations is reduced considerably.

Mechanisation in the developing countries has been more in the nature of a means for increasing production in a given situation. Mechanisation has been emphasised with the ultimate objective of increasing productivity of land, labour, irrigation and other inputs of production. While the productivity of land is a function of improved—technology of which mechanisation itself is a part, the productivity of labour, irrigation and other inputs can be augmented significantly by mechanisation.

Farm mechanisation in the area of irrigation has indeed increased net sown area, area sown more than once and reduced the culturable waste land in recent past. Mechanisation enhances the value of resources without necessarily effecting a physical addition to them. Most important example in this area would be the on-farm development works under Command Area Development Projects. Other important category of mechanisation is one which comprises all those numerous mechanical means whereby efficiency is imparted to agronomic practices These are in relation to soil, water seed, fertiliser, pesticide etc. Unique example is the seed-cum-fertiliser dril which aims at accurate placement o seed and fertiliser at proper depth an appropriate intervals in a manne unattainable by manual means.

A detailed exercise on the suppl of and demand for power throug different sources *viz.* human labour draught animals, tractors, power tillers engines, motors and power sprayer by the end of 2000 AD has been undertaken by the NCA. In this exercise, the NCA has very aptly considered the potentialities of the biologica source for power and attempted to exploit in a well balanced way takin into account the net sown area to increase from 120 million ha to 150 mi lion ha in 2000 AD. Accordingly, th contributions in terms of hp require to be made by these biologica mechanical and electrical sources ar estimated at 129 million hp.

In a comprehensive case study t assess the impact of farm mechanisation at various levels in different size group of farms undertaken in Nainita district of UP, it has been brought ou that process of mechanisation has increased cropping intensity, productivity per cropped hectare, labour employment (increasing hired labour an reducing family labour), gross as we as net income. However, the review of some of the studies reported b Hans P. Binswanagar (1978) as als those of Theodor Bergmann (197 did not provide conclusive evidence the positive and favourable effects farm-mechanisation in India. Perhap this may be due to built-in limitatio of the study, different methodologi adopted for the studies, lack of analy cal approach etc. It is against th background that the study recently conducted by the National Council of Applied Economic Research (NCAER) assumes significant importance. The findings of this study have also confirmed that process of farm-mechanisation directly and/or indirectly enhances the productivity, employment and net return of investment in agriculture. Thus, in view of exploiting mechanical and electrical sources of power, the most urgent need is to intensify our research and development effort for designing efficient equipment and also provide suitable organisation to meet the requirements of services, training etc within a manageable distance.

R & D in Japan

THE structure of industries in Japan is expected to undergo significant changes in the coming decade. Stimulus to growth is likely to be provided in the future by technological progress in electronics, energy, life and materials related areas. In an article in *Keidanren Review*, published by the Japan Federation of Economic Organisations, the vice-chairman of Keidanren, Mr Isamu Yamashita, suggests that Japan needs to be developed into "technology-oriented nation" as it has already developed into "trade-oriented nation". To achieve this goal concerted efforts must be made at government, private and, academic levels.

Mr Yamashita writes: "Let us see how research expenses (nominal) in the field of natural science have changed during the past two decades. In 1960, the total research expenditures amounted to Y184,400 million, in 1970 Y1,195,300 million, in 1978 Y3,570,000 million, and in 1980 Y4,380,000 million. Thus research spending increased at the average annual rate of 22.9 per cent in nominal terms and 14.8 per cent in real terms in 1967-70. In 1970-75, however, the growth rate dropped, because of the oil crisis, to 17 per cent in current prices and 2.7 per cent in constant prices. In 1975-80, however, the nominal and real rates of increase reached 10.7 per cent and 4.7 per cent, respectively. These are about the same as the real and nominal growth rates of the GNP for the 1975-80 period.

"The total research expenditures for 1978 is the third highest after that in the US (Y 9,960,000 million) and the Soviet Union (Y 6,150,000 million). As a percentage of the GNP (1978) the figure for Japan is 2.15 per cent, compared with 4.57 per cent for the Soviet Union, 2.64 per cent for West Germany, and 2.48 per cent for the United States. In the two recommendations submitted by the Council for Science and Technology, Japan's research spending is to be increased to 2.5 per cent of the GNP in the near future and to 3.0 per cent in the long run.

"As for spending classified by major groups of organisation, private corporations and organisations used 64.2 per cent or Y2,291,000 million of the total in 1978, up 8.6 per cent over the year before. Universities spent 20 per cent or Y712,600 million an increase of 13.2 per cent, and research organisations spent 15.9 per cent of the total, or Y566.300 million, a gain of 14.6 per cent

"Research expenses as a whole increased sharply in the 1960s because of vigorous spending by corporations. In the 1970s, however, corporate spending expanded less rapidly. In 1974-75 the total amount even dropped. In the years beginning 1976, however, spending again followed a rising trend. A stable increase is hoped for in the year ahead.

"A breakdown of 1978 spending is as follows: 16.6 per cent for basic research, 25.1 per cent for applied research, and 58.4 per cent for development research.

"In the field of corporate research primary emphasis is placed on development. Basic research is conducted primarily by universities and research organisations.

"Compared with Japan, the US Government contribution is exceedingly high, while the percentage of spending by industry are also considerably high. This goes to show that the United States has a system of research and development whereby private industry takes the lead with the government supplying development funds. In Japan, the goal is to increase the government share to 40 per cent at the earliest possible date so that private enterprises may participate more actively in the field of basic research.

"One problem the government has in entrusting basic and development research to private organisations is how to handle patents. In other words, the government needs to establish a policy as soon as possible concerning the approval of the use of industrial ownerships such as patents by companies that have undertaken such research programmes. The patent problem should not be allowed to stand in the way of joint efforts by the government, private industry and the academic community to set up an integrated research system."

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Company Meeting

The Tata Iron and Steel Company Limited

Chairman's Statement

THE following is the statement of Mr J. R. D. Tata, Chairman of the Tata Iron and Steel Company Limited, for the year 1980-81.

Having, for the past forty-three years, inflicted on you Chairman's Statements and speeches in most of which I bewailed the obstacles to progress and growth placed in the path of the Company by Government policies, or other factors beyond our control, it is a particular pleasure for me to be able to address you this time on a more cheerful and optimistic note.

Long-awaited change

2. This new optimism is warranted not so much by the improvement in the results of the past year's operations as by the significant change in the Government's steel pricing policies which culminated on the 24th of February 1981, when the Government lifted control over the prices of billets and bars, which had been in force uninterruptedly since 1941.

3. For the past thirty-five years or so, we have protested and argued against the unfair and unsound industrial price policies of successive Governments, which compelled the Indian steel industry, one of the most vital to the country's economy, to sell its products year after year at ex-works prices equivalent to half the domestic prices prevailing in other steel producing countries. The industry was thereby denied the financial resources that would have enabled it to keep pace with technological advances made elsewhere through a continuous replacement of obsolete equipment and processes.

4. My pleas for a more rational price policy fell on deaf ears or were met with the extraordinary argument that as the steel industry had, between 1923 and 1939, received subsidies and benefited from protective duties at the expense of the consumer, it was only right that it should repay the consumer by supplying cheap steel to the country. No account was taken of the fact that whereas the total cost to the country of the subsidies paid to TISCO and of the higher prices resulting from the protective duties charged on imports during those sixteen years was only Rs 11 crores, over the succeeding forty years, our Company alone was deprived of legitimate earnings after tax of something of the order of Rs 1,300 crores which, taking into account the depreciating value of the rupee, would amount to about Rs 3,400 crores today. Even if we had paid generous dividends from the extra earnings, Tata Steel's capacity would have been at least twice what it is today, and the Company would be producing annually an additional 2 million tonnes, saving the country some Rs 600 crores a year in precious foreign exchange.

5. While we may deplore the thirty-five years it took for the authorities to face up to the economic realities of the steel industry, which they still decline to do in respect of other industries such as cement, we must congratulate the present Government, and particularly its Minister for Steel, on their courageous decision to decontrol billets, bars and rods. By so doing, they have not only relieved the public sector plants and ours from the unfair compulsion not imposed on other steel producers of having to sell these products at uneconomically low prices, but they have done so at little or no cost to the ultimate consumer, for the benefit of the lower selling prices accrued largely to the trade. As at the same time, presumably, a good part of the profit made by the trade escaped tax upto now, deregulation will also benefit the Treasury and therefore the tax-payer and consumer.

Uniform prices essential

6. The method by which from April 1979 the Government compensated the main producers for increases in costs of controlled categories of steel by payments from the Steel Development Fund (SDF) based on each plant's own cost escalations caused us much concern, for it infringed the principle of price uniformity within the industry which had been accepted without interruption for decades. Such a system is unfair to those who, at considerable expense of money, effort and ingenuity, manage to keep their cost increases to the minimum, while it removes all incentives for further effort in that most desirable direction.

7. We have, therefore, urged the Government, and are continuing to do so, to maintain the principle of uniformity and with that intent to make any scheme of compensation for cost escalations in price-controlled products uniform for all the main producers. Deregulation provides the best and most effective means of rewarding efficiency and penalising inefficiency and should be extended to all categories of steel as soon as possible. In both the public and private sectors of the integrated steel industry, Government have ample means to prevent any profiteering. The acute depression prevailing throughout the world steel industry and the resultant relative low prices at which steel can be imported provides by itself an effective limitation on the prices which the Indian producers can charge.

Steel Development Fund

8. At the date of this report, the situation in regard to the Steel Development Fund is still not clear. As shareholders are aware, the Government had announced on the 9th of February this year, an increase of 20 per cent in the prices of all price-controlled categories of steel to be paid in toto into the Fund. However, subsequent to the decontrol of billets, bars and rods on 24th February, the Government decided in June 1981 that the scheme of contributions to the Fund as per the February announcement would apply only upto 31st March. Notwithstanding unconfirmed press reports, decisions whether the SDF is henceforth to be used exclusively for financing modernisation or also for the payment of compensation for cost increases, and as to the amount of contributions to the Fund and the categories on which they are to be made from April 1, 1981, are still to be announced.

9. I hope that in formulating the final scheme of things, the SDF will be reserved exclusively for financing modernisation and consequential minor expansion, and not for meeting cost escalations. In regard to the latter, so far as decontrolled categories of steel are concerned, the producers should normally look to market forces and their own efficiency and cost competitive-

ness. If the Government were at any time satisfied that imports of steel were taking place at uneconomically low prices amounting to dumping, they should, as in the past, resort temporarily to protective import duties. In the case of those categories of steel which continue to be price controlled in the public interest, the Government should increase such controlled prices from time to time to meet legitimate and unavoidable increases in costs. Such increases should be approved after only summary investigations of costs to avoid the long delays, costly to the producers, which invariably took place in the past.

10. An issue of particular importance to the integrated plants, including ours, concerns the terms on which loans are to be made from the SDF against approved modernisation programmes. We have represented to the Government that, as the accretions to the Fund will come from the amounts collected by the main producers, they should be lent back to them at a concessional rate of interest and not as announced at the rate charged by the financial institutions for commercial loans. As the Company's argument has not been accepted upto now, a further representation has been made urging reconsideration on the additional grounds, amongst others, that the funds to be lent will have cost the Government nothing to raise and that the higher rate of interest will increase the cost of modernisation, by about 15 per cent even after allowing for tax relief.

11. We have also urged that even though it may not be specially laid down in the SDF scheme, the amount loaned to each plant over the years should in practice bear a reasonable relation to the amount it had contributed to the Fund. Finally, we have also asked that the integrated steel producers should be represented on the Committee administering the Fund or, if that is not possible, that at least the views of the main producers should be taken into account in its administration and in the grant of loans.

Continuous investment programme

12. If I have dealt with at such length on the manner in which, and the authority by whom, the SDF is to be operated, it is because, apart from the Rs 100 crores already committed to us to finance a part of our Modernisation Programme, we expect to make substantial further calls on the SDF in the future, for we have no intention to rest on our oars after the completion of the first phase of the major programme of modernisation. This will necessarily be followed by a second phase in a process which must be a continuous one : for at least the rest of the decade. In addition, with our financial position strengthened by the increased profitability of our operations, we intend to undertake such programmes of diversification and development as are justified by our technical and material resources. The continued growth of a company such as ours need not come merely from an expansion of capacity and production of existing products. We shall seek every avenue open to us to make the Company grow in its total annual turnover, to the extent allowed to us by the Government and economic conditions. You may be sure that our intention will be to consider only projects which will give us a significant return, including that obtained from increased efficiency and productivity.

Bonus Shares and Convertible Bonds . . .

13. I was glad to note from press reports and market reaction that the Board's decisions in respect of dividends and the issue of Bonus Shares and Convertible Bonds have met with universal approval and appreciation, for over the years, shareholders have been inclined to accuse me and my colleagues of being excessively cautious in the matter of dividends and Bonus Shares, and thus to be unresponsive to their interests. Those who held such a view were perhaps unmindful of the severe limitations on our freedom to decide in these matters imposed on us by the Government financial institutions, the Companies Act and restrictive guidelines. To the extent that we were free to exercise our judgement, I believe that the decisions we took over the years provided the best possible compromise between the conflicting factors we had to take into account, including our anxiety to be fair to the shareholders while maintaining unimpaired the financial security of the Company.

. . . on generous terms

14. As soon as a favourable change took place in the earnings of the steel industry and in its prospects, there was no hesitation or delay on our part to formulate and announce the generous proposals before you in respect of dividends, Bonus Shares and Convertible Bonds. In fact, because the benefits of the Bonus Shares will accrue to the shareholders only next year when the Company will celebrate its platinum jubilee, and similar action obviously cannot be repeated for two or three years, the Directors went out of their way to make the bonus element in both schemes as large as possible in the existing circumstances. Not only was the Bonus Share issue fixed at a high 2 : 5 ratio, but the Convertible Bonds were specially structured to maximise benefits to the shareholders, particularly to small shareholders. In the light of these decisions, I hope that the myth that your Directors are unsympathetic to the shareholders' interests will once and for all be laid to rest. While I am naturally happy at the spectacular rise which has recently taken place in the value of your investment, I hope that a realistic view is being taken of the Company's long-term prospects of growth and profitability.

A great effort

15. In conclusion, while we may rejoice at the improvement in the Company's fortunes, let us not overlook the great efforts made by the whole organisation in offsetting the severe infrastructural obstacles which the Company continued to face throughout the year. Enormous quantities of coal had again to be brought in by road to Jamshedpur because of the continued failure of the Railways to discharge their obligation to provide adequate rail transport. In regard to power, although supplies from the Government power plants did show some welcome improvement towards the end of the year, our own ageing captive power facilities had this year again to be strained to the utmost in order to keep the steel plant producing at capacity levels. Cruel power cuts were imposed on our steel city where, without a murmur or protest, our 40,000 employees and their families, and hundreds of thousands of other citizens suffered great hardships for as many as seven to ten hours per day, day after day.

16. Our workers gave further proof of their loyalty and devotion to the Company which they, rightly, treat very much as their own, by defeating a deliberate attempt on the part of certain political forces to disrupt operations and bring the plant to a standstill, while, in keeping with the unique spirit which has marked industrial relations at Jamshedpur, communal and labour harmony were maintained at a time when the State suffered widespread unrest and disorder on both these counts.

17. Thus, while the striking gains made by the Company in the year under review were substantially due to changes in the Government policy, they could not have been achieved without the sustained effort, hard work and high morale displayed by our management and employees throughout the organisation, for which we should be, and indeed are, profoundly grateful.

J. R. D. TATA
Chairman.

Bombay, 3rd July, 1981.

Note : This does not purport to be a record of the proceedings of the Annual General Meeting.

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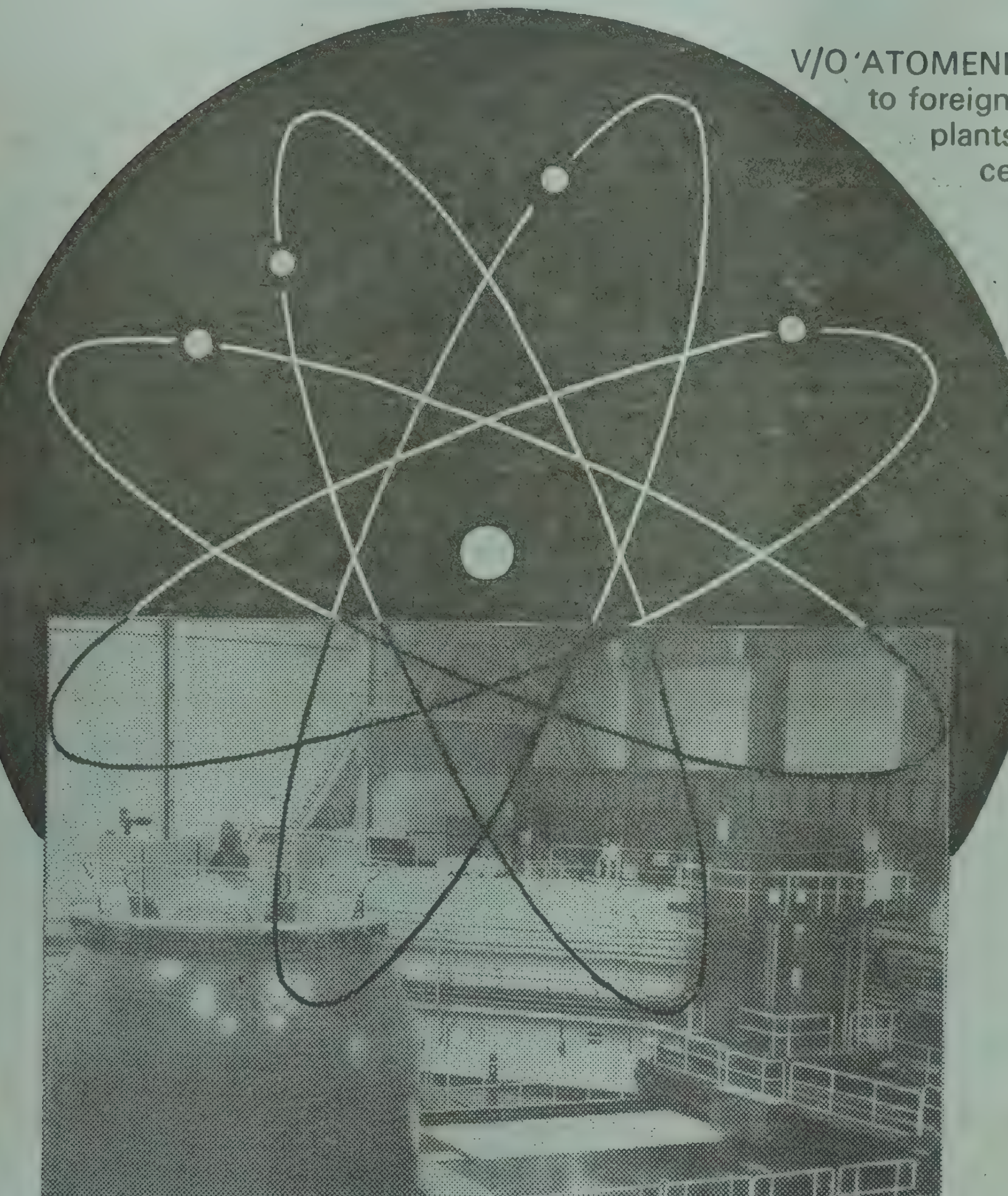

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GAYWAYS

CORPORATE SECTOR

In the market

Indu Nissan Oxo Chemical Industries

Indu Nissan Oxo Chemical Industries Limited (Regd. Office: R S No. 174, opp. Sonal Bangalow, Gotri Main Road, Vadodara 390005 Gujarat), will enter the capital market on July 24, 1981 with a public issue of 28,25,000 equity shares of Rs 10 each at par. The proceeds of the issue will be utilised to meet a part of the finance for the company's 12,000 tonnes annual capacity project at Bajwa, near Baroda in Gujarat, costing Rs 16.20 crores, for the manufacture of oxo alcohols. Mr Narendra Bhuva, managing director of the company, told newsmen in Bombay that the chief promoters, Indo Nippon Chemical Co Ltd were the largest manufacturers of plasticisers in the country, having an installed capacity of 11,600 tpa and an annual turnover exceeding Rs 17 crores.

The company's plant is advantageously located near its major suppliers of raw materials and consumers of its finished products. It will obtain syngas through a pipeline from Gujarat State Fertilisers Company Ltd, hydrogen from Gujarat Alkalies and at a later date di-iso-butylene from Indian Petrochemicals Corporation Ltd. Nearly 40 per cent of oxo alcohols manufactured by Indu Nissan will be consumed by Indo Nippon. Oxo alcohol is a main raw material in the manufacture of Alasticises. At present about 13,000 tonnes of oxo alcohol are imported annually in the country, while there is an indigenous licenced capacity of about 13,000 tonnes. The total demand is expected to increase to 38,000 tonnes by 1983-84. In fact, Indu Nissan has applied to the Government to increase its licenced capacity by an additional 15,000 tonnes per annum, the expansion cost of which will be substantially lower.

East India Syntex

East India Syntex Ltd (Regd Office: Plot No. 18, Industrial Area, Dharuhera, Dist Mohindergarh, Haryana) has completed its project to spin polyester viscose blended yarn at Dharuhera in a record time of ten months and started commercial production since February with the help of 11,500 spindles. The company is now entering capital market on July 29, 1981, with a public issue of 6.86 lakh equity shares of Rs 100 each totalling Rs 68.60 lakhs.

Mr H. P. Lohia, chairman of the company, told newsmen in Bombay on Wednesday that the company was already in the process of expanding and placed orders for 6,000 more spindles for the first phase of expansion which was expected to be completed by September 1982. In the second phase 5,500 more spindles will be set up and thus the entire expansion project would be completed by last quarter of 1983. The break-even point for the company was 65 per cent. The turnover in 1980-81 was expected at Rs 4 crores to Rs 4.5 crores and after completion of expansion it would rise to Rs 15-17 crores. The company has already achieved 100 per cent operating capacit from the current month.

The cost of the project is estimated at Rs 406 lakhs to be met as follows: equity issue Rs 140 lakhs and term loans from financial institutions Rs 266 lakhs. The project has all the fiscal benefits accruing from being established in a backward area. There is a sustained demand for blended fabrics and since there is no gestation period at all for the project, the investors can expect a reasonably good dividend in the near future, Mr Lohia added.

Jain Spinners

Jain Spinners Ltd (Regd. Office: 92-C, Mittal Towers, Nariman Point, Bombay 400 021) is entering the capital market with a public issue of 7.5 lakhs equity shares of Rs 10 each for cash at par totalling Rs 75 lakhs. The issue will open on July 22.

The company is setting up a spinning mill at Paithan in Aurangabad district of Maharashtra with an installed capacity of 14,280 spindles to manufacture polyester/viscose blended yarn, both grey and dyed. The plant has a capacity to produce about 2.45 million kg of yarn per annum on three-shift working. The company also proposes to instal a dyeing plant to meet the dyed polyester fibre requirement.

Mr Sukhbir Chand Jain, managing directors, told newsmen in Bombay that the erection of plant and machinery was nearing completion and partial production was likely to begin by the end of this month. It was expected to achieve full capacity by the end of the this year. In the current year, at 40 per cent capacity utilisation, the turnover was estimated at Rs 3 crores, and in 1982 at 85 per cent capacity utilisation Rs 11 crores.

The company also plans to undertake expansion in 1984 to raise the installed capacity to 25,000 spindles which is the licensed capacity. The cost of this expansion is placed at Rs 4 crores and it will be met mainly by internal accruals and borrowings.

Other developments

Standard Mills: Fresh bonus issue

The Standard Mills Co Ltd, a Mafatlal group company, has turned in highly satisfying results for the year ended March 1981 despite odds of varying orders. According to a preliminary statement released on Tuesday, sales and other income of the company has risen to Rs 104.48 crores during the year from Rs 90.95 crores in 1979-80. The gross profit has gone up to Rs 12.22 crores from Rs 10.76 crores and after providing for depreciation, investment allowance reserve and taxation, the net profit is higher at Rs 4.53 crores as against Rs 3.85 crores in the preceding year. After making certain adjustments the amount available for appropriation is Rs 4.78 crores (Rs 4.43 crores). Out of this Rs 3 crores (Rs 2.90 crores) have been transferred to general reserve and Rs 1.43 crores (same) for proposed dividends of Rs 22 per ordinary share and Rs 5.72 per preference share.

The good news for the shareholders is the board of directors' recommendation for the issue of bonus shares—the company's fourth since 1971—in the ratio of two-for-five. The earlier bonus issues were in 1971 (one-for-one), 1975 (one-for-four) and 1978 (one-for-five).

As explained by Mr C. C. Maniar, whole time director of the company in charge of textile division, the remarkable point about improved results was that these were achieved despite constraints of power and persistent rise in input costs. Last year alone prices of cotton had risen by 17 to 20 per cent, polyester from Rs 77-80 per kg to Rs 91 per kg, filaments by 10 per cent, viscose and polynosic yarn by 10 to 15 per cent, wages by Rs 100 plus 35 per cent per worker, petrochemicals by 15 to 20 per cent and utility charges by nearly 50 per cent. Though the rise in selling pric was not commensurate with these increases in costs, what enabled the company to maintain profitablity was appropriate changes in product-mix. Mr Maniar was cautious in predicting the outlook for the current year since costs continued to spiral, though he expected turnover to increase further this year. This is because the company

United Bank of India

Head Office : 16, Old Court House Street, Calcutta-700 001

STATEMENT OF POSITION

LIABILITIES

31st Dec. 1979		31st Dec. 1980
Rs.		Rs.
2,68,77,119	Capital : Paid-up Capital	2,68,77,119
3,68,44,491	Reserve Fund etc.	4,01,44,491
1219,75,46,849	Deposits & Other Accounts	13,26,14,80,785
69,19,58,099	Borrowings from Banks, Agents	44,76,78,228
35,98,75,849	Bills Payable	61,79,55,554
69,47,32,505	Bills for collection per contra	71,17,12,415
10,33,34,608	Other Liabilities	13,36,82,199
49,02,44,044	Acceptances, endorsements etc. per contra	62,32,37,293
	Profit & Loss Account	
3,74,422	Balance of Profit as per last Balance Sheet	4,48,432
3,74,422	Less transferred to Central Govt.	4,48,432
1,36,48,432	Balance of profit for the year	1,23,10,815
	Less : Transferred to :	
35,00,000	(1) Reserve Fund	33,00,000
93,00,000	(2) Provision for Bonus	82,00,000
4,00,000	(3) Investment Reserve	4,00,000
4,48,432	Balance to be transferred to Central Government	4,10,815
14,60,18,61,996		15,86,31,78,899

ASSETS

31st Dec. 1979		31st Dec. 1980
1,82,46,92,603	Cash in hand and with banks	1,92,85,62,732
3,00,000	Money at call and short notice	3,00,000
379,42,11,956	Investments (at or below cost)	4,22,69,57,106
703,22,74,186	Loans & Advances	742,18,19,919
69,47,32,505	Bills for collection per contra	71,17,12,415
49,02,44,044	Acceptances, endorsements etc. per contra	62,32,37,293
3,60,67,286	Premises	3,95,49,581
4,00,34,117	Furniture & Fixtures	4,13,85,640
68,70,29,183	Other Assets	86,74,69,229
22,76,116	Non-Banking Assets (at book value)	21,84,984
14,60,18,61,996		15,86,31,78,899

nsa UF!

as engaged in an ambitious moder- sation programme for which it will pend this year Rs 13 crores, including oreign exchange of Rs 6-8 crores. fter modernisation was completed in 983 the textile division will be fully utomatic. Exports were also picking p with sales abroad last year having nounted to Rs 3 crores in markets of K, USA, West Europe, Australia, New ealand and Arab countries. Mr laniar observed that textile division lone had sales of Rs 64.35 crores Rs 55.87 crores) during 1980-81 and ontributed Rs 5.01 crores (Rs 4.95 rores) to the gross profit.

Discussing the affairs of the chemi- al division, its whole time director, Ir V. Ramadurai, said that this divi- on had sales worth Rs 27.62 crores Rs 24.82 crores) during the year, hile its contribution to gross profit as Rs 7.21 crores (Rs 5.80 crores). number of new projects, he disclos- d, were on the cards *viz.*, expansion f caustic soda capacity from 86,000 onnes to 116,000 tonnes; plans to anufacture 3,000 tonnes annually of ethyl chloroform, 100 tonnes an- ually of dichloro dimethyl other, and ,000 tonnes annually of bleaching owder. A major scheme was further iversification in the basic drug field nd the company has applied for a cence to manufacture 50 tonnes annu- lly of ethambutol hydrochloride, 150 onnes annually, of drug intermediates ke D-1 and D-2 aminobutanol, 240 mil- on tablets of formulations and 4 mil- on capsules of paracetamol sulpha ethoxazole, isniazia, etc. All these chemes were in various stages of pro- essing by government authorities and ould contribute greatly to the pro- tability of the division in coming ears, Mr Ramadurai added.

orthcoming company meetings

JULY 18 TO JULY 24

THE GUNTUR TOBACCO LTD, Old ower House Building, Budampad oad, P.B. No. 167, Guntur-522 003. A.P.) (*July* 20, 11 *a.m.*)

BOMBAY TYRES INTERNATIONAL TD, Patkar Hall, S.N.D.T. Women's Jniversity, 1, Nathibai Thackersey oad, Bombay-400 020. (*July* 23, 4 *.m.*)

PUBLIC SECTOR

APSFC : Unique distinction

The Andhra Pradesh State Financial Corporation has completed 24 years of useful service for the industrialisation of the State of Andhra Pradesh. It was established on November 1, 1956 with the amalgamation of the erstwhile State Financial Corporations of Hyderabad and Andhra States. During the year 1980-81, the corporation has achieved the unique distinction of retaining the coveted No. 1 position for the second year in succession in all the areas of sanctions, disbursements and recovery, amongst all the state financial corporations in the country. The sanctions and disbursements made by the corporation since inception have crossed Rs 200 crores and Rs 125 crores respectively.

The cumulative sanctions and disbursements as at March 31, 1981 stood at Rs 209.70 crores and Rs 130.04 crores respectively. The gross financial assistance sanctioned, disbursed and amounts recovered during 1980-81 were the highest as compared to all the years since inception of the corporation. The gross sanction of assistance given by the corporation during 1980-81 has been higher at Rs 47.38 crores compared to Rs 39.63 crores during the previous year. The disbursements have also been higher at Rs 30.65 crores compared to Rs 27.48 crores in the previous year. The financial assistance outstanding as on March 31, 1981 has gone up to Rs 100.03 crores from Rs 75.66 crores as at the beginning of the year which meant an increase of 32.22 per cent.

The recovery of overdue amounts during the year has touched a record level. The total overdues of principal and interest at the end of the year were Rs 9.65 crores. Out of the total current demand of Rs 10.51 crores towards principal and Rs 9.14 crores towards interest, the corporation during the year has realised Rs 6.63 crores and Rs 6.56 crores respectively. The percentage of overdues in terms of the loans and advances outstanding as at the end of March 31, 1981 works out to only 9.84 compared to 12.23 at the end of the previous year.

During the year an amount of Rs 23.19 crores was sanctioned to 1,590 units located in backward areas compared to Rs 17.10 crores sanctioned to 1,186 units in the previous year recording an impressive growth of 31 per cent in terms of amount and 34 per cent in terms of number of units. During the year an amount of Rs 28.32 crores was sanctioned to 2,312 small and tiny sector units. The small scale and tiny sector units constitute 96 per cent of the total number of loans and, in terms of amount they constitute 70 per cent as at the end of March 31, 1981. An amount of Rs 1.16 crores was sanctioned to 68 units under various self-employment ventures during the year. Out of these, 31 loans were sanctioned to A.P. State Road Transport Corporation-sponsored passenger bus programme for an amount of Rs 55.37 lakhs providing employment opportunities to 248 educated unemployed candidates belonging to the weaker sections of the society.

The additions to the APSFC's share capital made by the State Government and IDBI during the year were Rs 3.79 crores which included an unilateral contribution of Rs 50 lakhs received from IDBI to equate their shareholding with that of the State Government. This increase enabled the corporation to raise the required loans from IDBI by way of refinance to meet its growing commitments.

The corporation operates through 12 branch offices and 8 field offices besides the head office at Hyderabad. Three of the branch offices and one of the field offices were opened during 1980-81.

Andhra Bancard

Andhra Bank is shortly launching a Credit Card, namely, the Andhra Bancard. Andhra Bancard is India's first bank credit card affiliated to VISA International, the world's largest credit card system. VISA has an ever-growing clientele of card-holders numbering about 87 million at present. With the Andhra Bancard, one can sign for any goods and service one needs and pay for them later. Currently, there are 2,000 VISA merchant outlets who would be honouring the Andhra Bancard also. The Bank is also enrolling a wide variety of outlets throughout the country including the best of hotels, restaurants and departmental stores.

Use of the Andhra Bancard gives the cardholder an interest free credit for a period of four to six weeks. The cardholder can charge any of his expenses to his Andhra Bancard and the Bank will make the necessary payments to the merchant establishments. The amount will be collected by the Andhra Bank from the cardholder during the first week of the following month. No interest will be charged from the date of purchase till the 15th day from the date of the statement. On the unpaid balances at the close of business on the 15th day, interest at the rate of 2 per cent will be charged. There is no admission fee or any service charge.

Financial analysis of operations of non-financial companies

Complied by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Bayer (India) Basic Industrial		Gujarat Carbon Basic Industrial		Herdillia Chemicals Basic Industrial		Polyolefins Industries Basic Industrial		Tata Chemica Basic Industria	
Industry Group	Chemicals		Chemicals		Chemicals		Chemicals		Chemicals	
	Year ended December		Year ended June		Year ended December		Year ended December		Year ended June	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	1,471.6	1,528.4	185.8	257.8	1,306.6	1,460.2	1,833.7	1,916.2	2,659.2	3,030.
(i) Paid-up capital (a+b)	811.0	811.0	166.7	167.5	735.0	735.0	900.0	900.0	993.9	993.
(a) Equity	811.0	811.0	166.7	167.5	735.0	735.0	900.0	900.0	933.9	933.
(b) Preference	—	—	—	—	—	—	—	—	60.0	60.
(ii) Reserves	660.6	717.0	19.1	90.3	571.6	725.2	933.7	1,016.2	1,665.3	2,036.
2. Borrowings (i+ii)	1,197.8	1,577.5	378.6	323.3	95.0	269.9	324.9	1,204.8	2 386.2	2,812.
(i) Long-term	77.4	115.0	265.5	270.6	35.0	2.0	24.0	425.9	894.4	1,096.
(ii) Short-term	1 120.4	1,462.5	113.1	52.7	60.0	267.9	300.9	778.9	1,491.8	1,715.
3. Non-current liabilities and provisions	—	—	0.2	1.3	—	—	—	—	4.0	4.
4. Current liabilities and provisions	734.0	595.3	49.9	60.0	540.7	522.4	439.7	400.5	947.9	1,270.
Assets (at the end of the year)										
5. Gross fixed assets	1,676.3	1,936.9	400.6	417.0	1 618.7	1,826.8	1,924.4	2,289.2	6,696.6	7,480.
6. Less depreciation	861.9	1,002.3	24.6	49.4	1,156.6	1,242.2	1,044.1	1.160.7	2 637.7	3,048.
7. Net fixed assets (5—6)	814.4	934.6	376.0	367.6	462.1	584.6	880.3	1,128.5	4,058.9	4,432.
8. Current assets (i+ii+iii)	2,588.9	2,766.1	238.5	274.8	1,480.1	1,663.0	1,712.2	2,268.4	1,865.4	2,582.
(i) Inventories	1.672.3	1,431.3	124.8	60.5	520.6	664.2	682.2	859.0	895.7	1,348.
(ii) Receivables and loans and advances	867.8	1,222.9	92.7	168.8	822.7	912.7	824.7	1,104.5	879.3	1.154.
(iii) Others	48.8	111.9	21.0	45.5	136.8	86.1	205.3	304.9	90.4	79.
9. Other assets	—	—	—	—	—	4.9	5.8	124.6	73.0	102.
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**3,403.4**	**3,700.8**	**614.5**	**642.4**	**1,942.3**	**2,252. 5**	**2,598.3**	**3,521.5**	**5,997.3**	**7,117.**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	4,573.3	4,787.0	389.3	823.2	3,025.4	3,816.8	2,717.8	3,379.0	4,259.8	5.784.
11. Increase in stock of finished goods and work in progress	355.7	–43.6	23.7	1.2	37.2	86.8	207.9	150.3	132.4	227.
12. Value of production (10+11)	4,929.0	4,743.4	413.0	824.4	3,062.6	3,903.6	2,925.7	3,529.3	4,392.2	6,012.
13. Other income	25.1	35.5	4.0	7.0	49.4	70.8	57.1	31.7	79.0	98.
Expenditure										
14. Materials, stores and other mfg. expenses	3,383.5	3,220.5	316.0	623.8	1,980.3	2.822.1	1.839.2	2,346.0	2,211.4	3,043.
15. Current repairs	51.9	57.0	1.1	29.8	64.5	77.4	21.2	27.9	223.6	309.
16. Salaries and wages	394.9	432.4	9.6	12.2	156.8	183.8	195.9	241.8	438.7	528.
17. Welfare expenses	28.2	33.0	0.5	0.9	15.0	18.4	33.3	50.2	52.8	58.
18. Managerial remuneration	0.4	0.4	—	0.1	3.0	—	0.9	0.3	0.8	0.
19. Other expenses	370.3	399.5	25.8	23.6	109.8	111 2	201.3	245.7	379.2	426.
20. Depreciation	103.6	151.9	24.2	24.8	72.5	89.3	111.5	130.9	400.6	512.
21. Other provisions	—	—	..	..	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	621.3	484.2	39.8	116.2	710.1	672.2	579.5	518.2	764.1	1,232.
23. Interest	158.7	264.3	39.6	45.0	7.3	14.8	21.6	92.8	202.3	263.
24. Tax provision	281.5	136.0	—	—	432.0	355.0	341.0	215.0	141.5	364.
25. Profit after tax (22—23—24)	181.1	83.9	0.2	71.2	270.8	302.4	216.9	210.4	420.3	604.
Appropriations										
26. Dividends (i+ii)	129.8	64.9	—	—	147.0	147.0	144.0	144.0	163.1	191.
(i) Equity	129.8	64.9	—	—	147.0	147.0	144.0	144.0	158.8	186.
(ii) Preference	—	—	—	—	—	—	—	—	4.3	4.
27. Profit retained (25—26)	51.3	19.0	0.2	71.2	123.8	155.4	72.9	66.4	257.2	413.
Total: Value of production and other income (1 +13) or Expenses and appropriations (14 to 22)	**4,954.1**	**4,778.9**	**417.0**	**831.4**	**3,112.0**	**3,974.4**	**2,982.8**	**3,561.0**	**4,471.2**	**6,111.**
Operational indicators (per cent)										
(a) Net worth/total net assets	43.2	41.3	30.2	40.1	67.3	64.8	70.6	54.4	44.3	42.
(b) Inventories/net sales	36.6	29.9	32.1	7.3	17.2	17.4	25.1	25.4	21.0	18.
(c) Operating profit/net sales	13.6	10.1	10.2	14.1	23.5	17.6	21.3	15.3	17.9	21.
(d) Operating profit/total net assets	18.3	13.1	6.5	18.1	36.6	29.8	22.3	14.7	12.7	17.
(e) Profit after tax/net worth	12.3	5.5	0.1	27.6	20.7	20.7	11.8	11.0	15.8	19.
(f) Equity earning/equity capital	22.3	10.4	1 2	42.5	36 8	41.1	24.1	23.4	44.5	64
(g) Equity dividend	16.0	8.0	—	—	20.0	20.0	16.0	16.0	17.0	20.
(h) Equity dividend coverage. (No. of times)	1.4	1.3	..	..	1.8	2.5	1.5	1.5	2.6	3.
(i) Paid-up value per equity share (Rs.)	100.00	100.00	10.00	10.00	10.00	10.00	100.00	100.00	10.00	10.0
(j) Market price of an equity share (Rs.)	288.25	251.00	14.25	28.90	26.75	25.75	272.75	288.00	34.75	69.5
(k) Gross yield	5.6	3.2	..	..	7.5	7.8	5.9	5.6	4.9	2.
(l) Gross fixed assets formation	9.8	15.6	8.3	4.1	5.6	12.9	4.8	19.0	10.6	11.
(m) Debt/equity	0.05:1	0.08:1	1.43:1	1.05:1	0.03:1	..	0.01:1	0.22:1	0.34:1	0.36:

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of vario items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are somet made in other items also. Totals may not add up due to rounding off.

EQUITIES

Nervous bulls

Bombay, July 6

After enjoying near-boom conditions over the past one month, equities came in for nervous bull offerings during the past week. The delay in 'pay in' and 'pay out' of June 19 settlement caused fears among investors. According to certain circles, the market has been facing payment problems involving crores of rupees as a result of over-trading in Tata Steel, TELCO, ACC, Premier etc.

In view of the speculative activity, the stock exchange authorities had to issue warnings twice during the week against excessive speculative trading. They also threatened stringent measures such as extending earlier restrictions on 17 scrips in 'A' group to all the scrips in the same group.

Against such unfavourable market conditions, equities resumed trading on a weak note. Century started lower at Rs 795 against the previous official closing of Rs 811 and the scrip declined further to Rs 778 on increased selling pressure. With the partial recovery later to Rs 785, the net loss was Rs 26. Standard dropped from Rs 670 to Rs 653 before staging a recovery to Rs 658, indicating a net loss of Rs 12.

TELCO, however, bore the brunt of the selling. The selling developed following the announcement of unchanged dividend of 20 per cent for 1980-81. The market expected at least a two points increase in the dividend. The profit figures also fell far short of market expectations. The scrip nosedived from the opening level of Rs 800 to Rs 685 on release of bonus issue, dividend and profit figures. Subsequently, the scrip made a small recovery to Rs 685. On balance, it yielded Rs 49. Tata Steel, ACC, Gwalior Rayon, Polychem, Mukand, Larsen and National Rayon also participated in the downswing. G.E. Shipping, Scindia, Bombay Dyeing and Voltas, however, ruled steady to better.

In the cash section, Baroda Rayon, Indian Rayon, J.K. Synthetics, Nirlon, South India Viscose, Gujarat Steel, Mahindra Ugine, Zenith Steel, Ashok Leyland, Kinetic, MICO, GSFC, Indian Hotels, Colgate and Mahindra and Mahindra were easy. On the other hand, Reliance, Garware Nylons, Siyaram, MALCO, KSB Pumps, Bajaj Auto, Bayer, Ratnakar Shipping, PIL and W.I. Erectors finished on the plus side.

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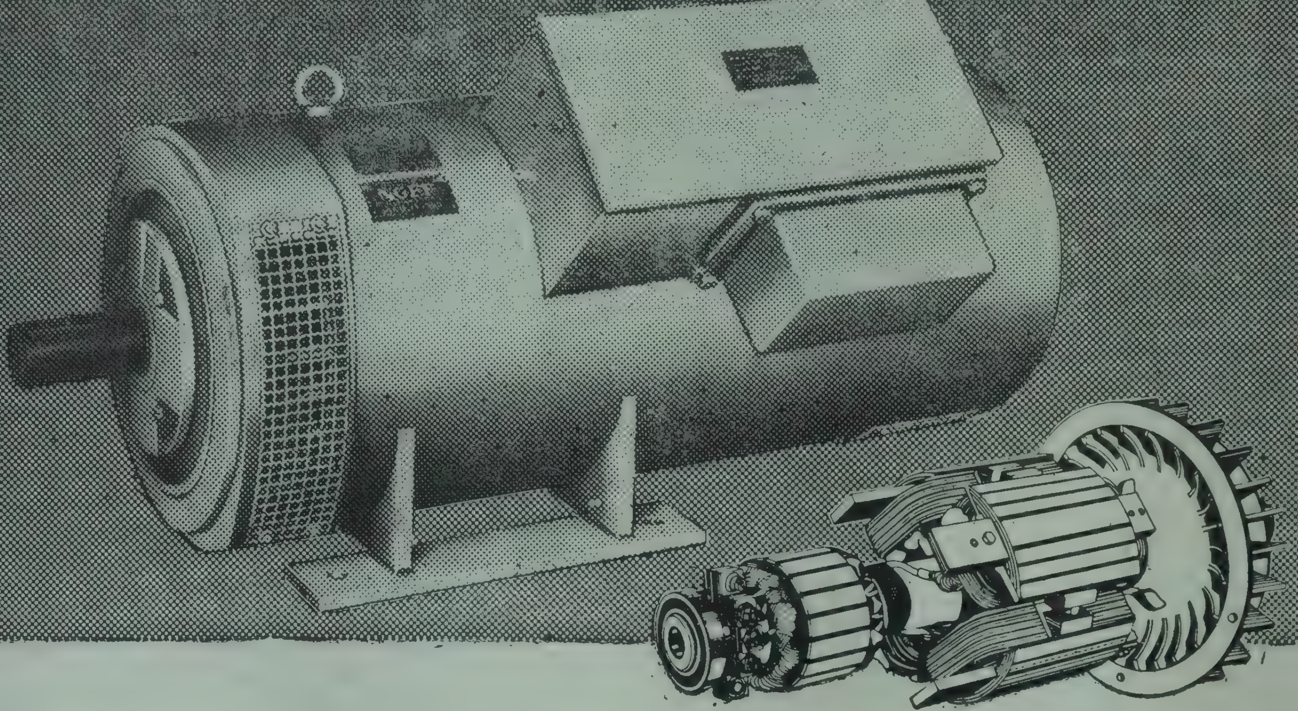

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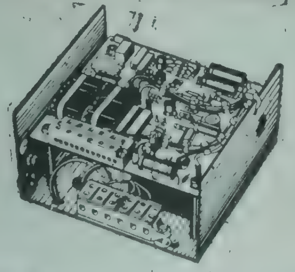

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CHAITRA/NGEF/23581B

Market Gossip

No dividend freeze

THE Government has revealed its anti-inflationary package. The Bank rate has been raised by one per cent, compulsory deposit rates for incomes above Rs 50,000 have been raised and banks, companies, co-operative societies and partnership firms have been directed to repay deposits made with them by any person by account payee cheques or bank drafts when the amount of deposits together with interest is Rs 10,000 or more. The last measure, it is hoped, would curb *benami* transactions. But the much expected dividend freeze is not there and the stock markets are happy. Dalal Street, of course, has not done any business during the week ending July 11 (and there are doubts whether it will transact any business during the week ending July 18) and conclusions can be drawn only from the Kerb dealing. The Bank rate hike has apparently not worried the stock markets because lending rates are already high and an increase in the Bank rate of one per cent makes no difference. Immediately after the announcement of the anti-inflationary package on July 11 the shares were steadier in Kerb. The Century was initially marked down from Rs 755 to Rs 740 but rose to Rs 775. Tata Steel after declining from Rs 260 to Rs 250 rose to Rs 286 and Telco were quoted at Rs 680.

Gold on retreat

FOR the first time on July 7 gold dropped in 20 months below the $400 troy ounce level—$399.50. There had been a continuous fall in recent days and during the week ending July 4 itself the decline was as much as $30 in London. The market has rallied somewhat and by July 10 the yellow metal was quoted at $410. It is not known whether this rally will be maintained.

Some gold experts had hoped that the central banks would support gold if the price dropped below $430. This has not happened and uncertainty has developed in gold prices. Some dealers expect the price to drop even to $375 if the present high rates of interest are maintained. In fact, it is the high interest rates whether in Europe or America and the strength of the dollar that has been behind the continuous decline in gold prices. There were also indications that South Africa, the largest producer of gold in the world, unlike last year, would sell all the gold it produced on the international markets in view of the fact that the country is facing some balance of payments problem. It had held back last year 66 tonnes out of its over 700 tonnes production. That country has also taken to selling gold in futures market rather than in spot. There may also be increased sales from the Soviet Union.

Will this have an impact on the domestic market? Gold prices have been ruling steady above Rs 1,600 per 10 gm during all this time of the decline in the world markets. Once again world gold has become cheaper by Rs 350 to Rs 400 per 10 gm and trade sources fear that there could be increased smuggling of gold in the country. Already some three to five tonnes of gold are reported to have found their way in the country during the months of January to June this year.

Turmeric in crisis

THE turmeric market is facing very rough weather. There has been a steep fall in exports and domestic consumption is lower, too, at a time when production has been normal. The turmeric output in 1980-81 is placed at 1,44,000 tonnes. There was a carry-over also of 15,000 tonnes from the previous year. Its production, however, has been fluctuating—it was 1,79,000 tonnes in 1979-80, 1,64,000 tonnes in 1978-79 and 1,85,000 tonnes in 1977-78.

Domestic consumption is around 1,20,000 tonnes. Exports have also declined owing to the war between Iran and Iraq. During the year 1980-81 exports totalled only 3,000-4,000 tonnes as compared to as much as 21,000 tonnes in 1979-80 and 10,300 tonnes in 1978-79 and 9,400 tonnes in 1977-78. According to trade sources, the doubling of the exports in 1979-80 (normal exports are 10,000 tonnes) was because of silver being smuggled through turmeric bags. Following reports about smuggling Bombay customs had confiscated about 1,200 kg of silver which they found was being smuggled through turmeric bags. Naturally despite "heavy" exports of turmeric the price was not at its best that year. Actually it was in 1977 that turmeric fetched the highest price of Rs 900 per 100 kg. It dropped to Rs 250 in August 1980 and it is now around Rs 300 to Rs 350 per 100 kg.

Sangli is the most important centre for turmeric and it is reportedly saddled with heavy stocks of 32,600 tonnes at present against the normal stocks of 15,000 tonnes. Sangli is also the one centre which runs forward trading in turmeric. If there is no improvement in prices and the demand does not pick up, traders feel production is bound to suffer in future.

Aluminium : Glut in Japan too?

THE present glut in aluminium is not a phenomenon restricted to India alone, but elsewhere too it is causing considerable heartburn to aluminium producers. In Japan, for example, it has become virtually a question of survival for producers as demand continues to be sluggish because of industrial recession and at the same time cheap imports of aluminium are flooding the markets. The Japanese Government, which has realised the gravity of the situation, is now discussing with the producers plans to cutback minimum production to a level that is considered necessary for the industry to survive. It appears the producers are inclined to accept an output level of 700,000 tonnes as against the present 1.1 million tonnes a year. But they have also emphasised that in order to make output cutbacks really effective, it will be equally necessary to curb the present growth in imports of the metal.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*July 6, 1981*	*A week ago*
Groundnut	(*Rajkot*)	533	517
Rapeseed	(*Kanpur*)	513	495
Sesamum	(*Delhi*)	653	625
Castorseed	(*Kanpur*)	278	273
Linseed	(*Kanpur*)	490	525
Sugar	(*Bombay*) (*a*)	658	669
Cotton	(*Bombay*) (*b*)	4,400	4,400
Jute	(*Calcutta*) (*c*)	218	218
Aluminium	(*Bombay*) (*d*)	1,515	1,520
Copper	(*Bombay*) (*e*)	3,460	3,425
Lead	(*Calcutta*) (*f*)	1,140	1,125
Zinc	(*Calcutta*) (*g*)	1,525	1,525
Gold	(*Bombay*) (*h*)	NQ	1,630
Silver	(*Bombay*) (*i*)	NQ	2,390
Caustic soda	(*Bombay*) (*j*)	605	610
Soda ash	(*Bombay*) (*k*)	242	242

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap. (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard. (i) .996. (j) Flakes and (k) Tata NQ—Not Quoted

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COMMODITIES

Subdued conditions in cotton

Bombay, July 6

Subdued trading conditions prevailed in the spot cotton market during the past week with limited business passing. The week witnessed a raging controversy as to whether the monopoly cotton procurement is dead or is dying or will die soon enough.

The strong representation made by the Indian Cotton Mills' Federation against any form of monopoly anywhere in the marketing of cotton has been mainly responsible for stirring up the storm over the scheme. The ICMF made it categorically clear that no useful purpose would be served by extending the scheme to Gujarat as had been proposed by vested interests in Gujarat. At the time the proposal was made, it is significant to note. Mr Pranab Mukherji was intermittently camping in Ahmedabad in connection with a by-election.

With the expiry of its term by the end of June, the scheme in Maharashtra did not get the green signal for its continuance from the Centre. There were strong reports that the scheme was dead in the State. The following day, greatly agitated by such reports, the State Government came out with the declaration that the scheme was very much alive.

Soon, the Union Finance Minister entered the fray and declared quite unequivocally that the Centre was not in favour of monopoly procurement scheme in cotton by the State Governments. Instead of such schemes, the Minister favoured support prices to ensure remunerative returns for the cotton growers. In other words, this meant that Maharashtra Government would have a tough time to get approval from New Delhi for the extension of the scheme for another year, let alone ten years as had been originally mooted by the concerned interests. As for Gujarat, the scheme is as good as stillborn.

In the meanwhile, hectic lobbying is going on in New Delhi to persuade the authorities to permit the continuance of the scheme in Maharashtra as its suspension would grievously hurt the interests of the poor farmers, in the welfare of whom both the Centre and the State were committed.

The Government of India also came out during the week under review with an announcement of an upward revision in the subsidy on controlled cloth as also in the retail selling prices of such cloth. The total subsidy would go up by Rs 8 crores to Rs 48.75 crores.

Now that the Government has accepted the need to revise the prices of controlled cloth in keeping with the escalation in the cost of production, mill circles are anxiously awaiting the Government's decision in respect of cheap cloth too. The Indian Cotton Mills' Federation has, in fact, sought the obolition of the scheme as the existing selling price fixed by the Government is far below the cost of production and no mill is in a position to suffer the loss in consequence.

The following has been the trend of prices of some of the leading cotton varieties :

(Rs. per candy)

	July 3	June 26
Digvijay	5,050-5,150	5,100-5,150
Kalyan	4,750-4,850	4,800-4,850
Saurashtra CO2	4,850-5,000	4,850-5,050
Shankar 4	5,800-6,200	5,850-6,200
Maharashtra H 4	5,400-5,550	5,400-5,550
MP H4	5,250-5,400	5.250-5,400
MP Y1	4,900-5,000	5,950-5,000
MP 1007	5,150-5,250	5,200-5,300
MP A 51/9	5,050-5,150	5,100-5,200
MCU 5 Guntur	5,800-6,050	5,900-6,100

Increase in yarn prices

Bombay, July 6

A rise in prices was noticed in the local yarn market during the past week 150D NRC, 120D NRC, 150D CR, 120D CR, were quoted higher at Rs 51.21. Rs 53.96. Rs 50.66 and Rs 53.96 against Rs 49.27, Rs 52.86. Rs 48.72 and Rs 52.86 respectively. The prices of 100D SIV and 100D acetate, however, remained steady at Rs 55.07 and Rs 41.85 respectively.

Sacking, hessian gain

Calcutta, July 6

During the past week jute goods in the Calcutta gunny market steadied up towards the close after ruling relatively quiet in the earlier part on speculative buying aided by rumours that the Centre would help the jute industry in building up a buffer stock of goods. Jute industry representatives were in the capital this week for discussions in this connection.

Prices of both sacking and hessian gained as a result of the speculative buying. However, genuine business was restricted in the absence of new orders from overseas countries and slow offtake on domestic account.

The fibre market was steady during the week reflecting a rise in the floor price of fibre announced by the Centre.

The fixation by the Union Government of a higher floor price for raw jute at Rs 175 a quintal—Rs 15 more than last year—has been received with mixed feelings in industry and trade circles. Both growers and traders have welcomed the increase but the industry's misgivings in this regard were expressed by its spokesman.

The industry feels that with the jute mills already hit by a recession in demand leading to a pile-up of jute goods stocks primarily because of domestic prices ruling above those of competitors, there is need for caution to add up to the cost. The need to give a fair return to the grower for his produce is certainly important and should be looked into, but avenues of assuring this by other means should receive attention rather than resorting to a price hike of raw jute—the essential raw material accounting for over 50 per cent of the industry's production cost.

It should be noted, he said, that this is the first time that such higher rate of increase on this raw material has been announced. In line with the recommendations of the task force on jute textiles, adequate incentives for cultivation and production of quality fibre will be built into the price structure of raw jute notified by the Jute Commissioner, it is stated.

The Jute Corporation, which is to ensure price support to raw jute, proposes to absorb this year 2.11 million bales against 1.06 million bales last year.

At the annual general meeting of the East India Jute and Hessian Exchange Limited held here recently, Mr Braja Mohan Mahanty, union Deputy Minister for Civil Supplies, said that he had reports of rampant illegal forward trading in many commodities including raw jute and hessian. The minister did not know if any of the members of the exchange were participating in such activities. Forward trading at present was permited in sacking alone.

He reminded the exchange of its responsibility to keep a watch on such activities and

THE HINDOOSTAN SPINNING AND WEAVING MILLS LIMITED

NOTICE

The HUNDREDTH Annual General Meeting of the Shareholders of the Company will be held at "Patkar Hall", Nathibai Thackersey Road, [Off Maharshi Karve Road, Bombay-400 020. on THURS DAY August 27, 1981 at 4.00 P.M. The Notice convening the Meeting and the Explanatory Statement annexed there to are being forwarded separately to all concerned.

Pursuant to Section 154 of the Companies Act, 1956, the Register of Members in respect of Equity and Preference Shares of the Company will remain closed from FRIDAY, August 7, 1981 to THURSDAY, August 27, 1981, both days inclusive.

BY ORDER OF
THE BOARD OF DIRECTORS

Registered Office :
"Sir Vithaldas Chambers",
16, Bombay Samachar Marg,
Bombay-400 023.

E. VIJAYAGOPALAN
SECRETARY

Date : July 8, 1981.

report them to the authorities concerned for approriate action. The reputation and competence of the exchange would be judged by its success in eradicating this evil, he said. Mr B. N. Kapre, chairman, Forward Markets Commission, in his address said that jute mills and traders should see that the growers got the minimum statutory prices for raw jute. They should keep in mind that the Director-General of Supplies and Disposals bought B-twills from the mills generally on a cost plus basis taking into account the statutory minimum price payable to the growers, he said. Mr Balakrishna Dalmia, president of the exchange, in his speech said he was worried about the Essential Commodities (Special) Powers Bill 1981. The existing laws, he said, were adequate to deal with unscrupulous traders. The bill aimed at arming the executive with mandatory powers for summary trial and for making economic offences non-bailable. These powers were likely to be misused, he apprehended.

THE STANDARD MILLS COMPANY LIMITED

Registered Office:

Mafatlal Centre
Nariman Point
Bombay-400 021.

To

The Members,
The Standard Mills Company Limited.

At the Meeting of the Board of Directors of the Company held on Tuesday, the 14th July, 1981, the Directors have recommended to the Members the declaration of the following Dividends, subject to deduction of tax, if any, for the year ended 31st March, 1981 :

(a) Rs. 5.72 per share on 6,000 First and 6,000 Second Cumulative Redeemable Preference Shares of the Company.

(b) Rs. 22 per share on 6,46,824 Equity Shares of the Company.

The Dividends as recommended by the Directors when declared by the Members at the ensuing Annual General Meeting of the Company to be held on 1st September, 1981, will be paid at par at all the Branches of Central Bank of India, in India, from Thursday, the 10th September, 1981, to those Members whose names appear on the Register of Members of the Company as on 12th August, 1981.

The Board of Directors have also recommended issue of Bonus Equity Shares in the ratio of 2 Bonus Equity Shares for every 5 Equity Shares held in the Company, subject to requisite consents from the Members, Financial Institutions and the Controller of Capital Issues, being received.

The Register of Members and the Share Transfer Books of the Company will remain closed from Thursday, the 23rd July, 1981 to Wednesday, the 12th August, 1981 (both days inclusive) for the purpose of payment of Dividends for the financial year in ended 31st March, 1981.

Members are requested to notify immediately change in their addresses, if any, to the Company's Share Department at Rustom Building, 29, Veer Nariman Road, Bombay-400 023.

By Order of the Board
B. D. DATAR
Secretary.

Dated: 14th July, 1981.

Edible oils flare up

Bombay, July 6

Edible oil prices flared up in the oilseeds market during the past week. Groundnut oil spurted by Rs 9 to Rs 145.75 per 10 kg including four per cent sales tax imposed by the Maharashtra Government since July 1. The firmness was attributed to scarce supplies from producing centres.

Reports of favourable weather in groundnut producing areas made no impact on the price front because of uncertainty of supply from Saurashtra. Groundnut Karad bold, Saurashtra bold and Saurashtra quality hardened by Rs 7 each to Rs 592, Rs 597 and Rs 602 respectively per 100 kg.

The firmness in groundnut oil pushed up the prices of imported oils. Palmoleine jumped by Rs 10.50 to Rs 145, soyabean by Rs. 5.50 to Rs 136 and RBD by Rs 4 to Rs 117 per 10 kg including 4 per cent sales tax.

Costorseed came in for fresh support while its oil edged up on scattered export inquiries. Madras small and Kanpur bold rose by Rs 6 each to Rs 312 and Rs 302 per 100 kg. Castor commercial oil gained 90 paise at Rs 68.65 and BSS oil 25 paise at Rs 73.50 per 10 kg.

In view of the hardening tendency in groundnut oil, linseed oil improved by Rs 7 to Rs 120 per 10 kg including 4 per cent sales tax. Linseed bold, however, yielded Rs 20 at Rs 460 on discouraging advices from the north.

Most of the cakes were on the decline on slack export demand. Castor cake, however, moved up by Rs 14 to Rs 754 per tonne.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :—

	4.7.81	27.6.81
G. nut		
Karad Bold	592.00	585.00
G. nut oil	145.75	136.75
Cast. Md. Sm.	312.00	306.00
Cast. oil com.	68.65	67.75
Cast. oil BSS	73.50	73.25
Linseed Bold	460.00	480.00
Linseed oil	120.00	113.00

Tea : Assam mediums firm

Calcutta, July 6

At the weekly leaf tea auctions the offerings of 22,109 packages of CTC teas met with fair demand. Best Assam brokens sold at irregular levels whilst the good sorts showed a lower tendency. Plain and medium varieties sold at firm to dearer levels. The blenders operated at lower limits whilst the Gujarat buyers were extremely quiet and the Gulf was selective. There was selective continental inquiry on the best liquoring brokens on offer. A line of Hajua BOP was sold at Rs 31.50 which was the highest price realised in the sale for an Assam broken grade.

Dooars brokens plain and medium showed a lower tendency whilst the better descriptions on offer sold at firm to dearer rates. The blenders operated actively, whilst the Gujarat buyers were extremely selective and Punjab was virtually out of the market. The USSR once again operated for the better bolder brokens up to Rs 15. All fannings met with better demand and sold at dearer levels. Medium descriptions on offer were often dearer by Re. 1 to Rs 2 per kg. Best Assam fannings sold between Rs 20 and Rs 23.50. There was good inquiry from the ARE, the UK shippers and the major blenders, whilst the Gujarat buyers operated largely for dooars fannings on offer.

The 6,419 packages of Darjeeling teas offered met with good demand. Plainer whole leaf grades sold around last levels, whilst the improved liquoring lines were dearer with quality. Selected teas with second flush character sold well. These elicited inquiry from West Germany and continent, with support from the USSR. The cheaper varieties were absorbed by one of the blenders and the USSR. Darjeeling brokens sold readily at fully firm to dearer rates and met with inquiry from the USSR, Gulf, rontinent and internal buyers. Fannings sold at irregular rates with the brighter liquoring lines showing a dearer tendency, and were absorbed by the traditional exporters as well as the local dealers.

The 45,904 packages of orthodox teas offered met with a good demand. All orthodox brokens were absorbed at fully firm to dearer rates following quality. The USSR continued to absorb the bulk of the offerings whilst the Gulf operated selectively. Whole leaf grades followed a similar trend. Tippy lines on offer were largely absorbed by the USSR. Afghanistan was active for the medium categories on offer and these sold at firm to dearer rates. There was also selective inquiry from Iran. Good liquoring orthodox fannings sold at dearer rates. The remainder were absorbed by the ARE at firm to dearer levels.

The 14,012 packages of dust offered at the sale met with a fair demand. All medium and good CTC dusts with improved liquors sold at firm to dearer rates. The remainder were easier particularly the best categories. Exportable Pekoe dusts were also easier. The blenders operated with lower limits whilst the Gujarat buyers are also less active. The ARE continued to offer good support whilst the UK shippers operated for better liquoring Pekoe dusts on offer. Selected brighter liquoring orthodox dusts sold at dearer rates whilst the remainder eased in value.

Grains gain ground

Bombay, July 6

Foodgrains ruled steady to better and their prices gained ground in the local market during the past week. This was attributed to poor arrivals and good demand.

Among cereals, wheat Saurashtra variety recorded a rise of Rs 6 over the last week at Rs 208-230 per quintal due to poor supplies. The inflow averaged 600 to 700 bags per day by road from Gujarat. Wheat superior variety ruled steady at Rs 290-330 per quintal. Advices from producing centres were quiet.

Activity in rice was limited. Surti kolam was quoted steady at Rs 340-400 per quintal and basmati at Rs 450-600 per quintal. Demand was at a low ebb.

In coarse grains, jowar, bajra and maize prices persisted at the previous levels. The turnover was poor. Arrivals were limited. Jowar was traded at Rs 185-225 per quintal, bajra fetched Rs 165-230 per quintal and maize was in demand at Rs 155-160 per quintal.

Among pulses, gram recorded a rise of Rs 18 to Rs 380-395 per quintal. Arrivals were meagre and the demand was good. Masoor dal spurted by Rs 10 to Rs 501-505 per quintal on good demand and paucity of supplies. The undertone was firm. Tur dal advanced by Rs 12 to Rs 485-575 per quintal, urad (Khandesh) and moong chumki ruled steady at Rs 320-325 per quintal and Rs 425-450 per quintal respectively.

Sugar drifts

Bombay, July 6

Sugar prices drifted further during the past week owing to sustained heavy offerings by producers and local stockists. Both seemed anxious sellers in view of the larger release for internal consumption for July and reports of the impending import of two lakh tonnes. The undertone was weak and demand dull. Sugar C-30 lost Rs 11 to Rs 649-662 per quintal. The price of C-30 grade sugar as on July 4, 1981 was lower by Rs 8 per quintal than on the corresponding date a year ago.

The wholesale market received 21,027 bags of sugar during the week under review. The week-end stocks thus declined from 3,851 bags to 2,443 bags. The State sugar factories were unloading the commodity at Rs 625-630 per quintal—Rs 30 lower than last week's level.

Khandsari superior was quoted lower by Rs 30 at Rs 600 per quintal. The week-end stocks with the dealers improved from 423 bags to 775 bags.

Gold and silver erratic

Bombay, July 6

An erratic tendency in both gold and silver marked the trading in the Bombay bullion market during the past week.

Standard mint gold opened at Rs 1,635 per 10 gm and eased gradually to Rs 1,610 per 10 gm before closing at Rs 1,640 per 10 gm. Ready silver (.999 fineness) opened at Rs 2,420 per kg and after dipping to Rs 2,375 per kg, it was finally placed at Rs 2,415 per kg.

Money easy

Bombay, July 6

Conditions in the Bombay short-term money market were fairly comfortable during the past week. Interest rates opened at 9 per cent and moved between 7 per cent and 9 per cent till July 2 (Thursday) and declined to 5 per cent on July 3 (Friday) only to harden to 9 per cent at the close of the week.

Spurt in aggregate deposits

Bombay, July 6

Aggregate deposits of all scheduled commercial banks spurted by Rs 415.40 crores to Rs 39,927.24 crores during the week ended June 26, 1981. Bank credit expanded by Rs 22.75 crores to Rs 26,294.06 crores. The balances of banks with the RBI increased sharply by Rs 251.36 crores to Rs 4,516.82 crores and their borrowings from the RBI went up marginally by Rs 1.56 crores to Rs 564.26 crores.

COMPANY NOTICES

BHARAT STEEL TUBES LIMITED

NOTICE

It is hereby notified for the information of the public that Bharat Steel Tubes Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for shipping. The estimated annual value of services rendered will be approximately Rs.5.70 Crores. Other particulars of the proposed new undertaking are as under:—

(1) Name of the proposed undertaking	: No new name will be given to this undertaking.
(2) Name(s) of person(s) or authority/authorities proposing to establish the new undertaking, where it is a body corporate furnish details of its management structure together with those of the proposed undertaking.	: Bharat Steel Tubes Limited is managed by a Managing Director. The new undertaking will be managed by the management of Bharat Steel Tubes Ltd.
(3) Capital structure of the applicant person or authority and of the proposed undertaking :—	Rs. in Crores
Authorised Capital of the Company	: 10.00
Issued, Subscribed and paid-up	
—Equity	: 2.70
—Preference	: 0.80
(4) Proposed location of the new undertaking	: Vessels shall ply over international Sea, but the operations shall be controlled from India.
(5) Brief outline of the cost of project the scheme and source of finance.	: The estimated Capital outlay is Rs.21.6 Crores which is proposed to be financed 10% by internal sources and 90% by long term loans.

Any person interested in the matter may take a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice intimating his views on the proposal indicating the nature of his interest therein.

V.K.HAJELA
VICE PRESIDENT (PROJECTS)

Dated this 2nd day of July, 1981

Regd. Office

Allahabad Bank Building
17-Parliament Street
NEW DELHI-110 001.

Beyond headlines

The control factor

By SIDDHARTHA GANGULI

BUREAUCRACY—one of the common approaches to controlling in administration, thrives on overcentralisation. In the overcentralised administrative system, quite often, hasty decisions are taken on proposals that had hardly been discussed. A glaring example is President Carter's bill on energy crisis which was framed and passed in haste to be torn to pieces by the US Senate. This and other major ills of the bureaucratic system of government were brought to the fore once again by the Parkinson Law famed Professor Cyril Northcote Parkinson while addressing the Indian Chamber of Commerce at Calcutta. The theme of his talk was 'Excessive Control'.

Rejecting excessive centralisation and its associated problems as 'nonsense', the septagenarian satirist highlighted that most central governments were pursuing policies of making regional governments mere executing agencies of the central decisions. He suggested that the centre ought to relieve itself of responsibilities of local nature and devote its time and energy to study in detail and formulate policies on national and international matters. The regional legislatures, on the other hand, should decide on the local issues such as welfare, housing, health, and education since the needs related to these were likely to vary from one region to another as there might be variations in culture, customs, dialect, habits, and so on.

As recent Indian experiences on the continuing Centre-state tussle and sustained struggle for authority between the Central Ministries and the public sector undertakings controlled by them have shown, Parkinson's recommendations regarding decentralisation would have to cross many hurdles before they could be implemented in practice. And, most of these hurdles are expected to be caused by the human factor as no individual is willing to share power with another. Same is the case with a group of likeminded individuals as represented by the party in power. Parkinson himself has, perhaps inadvertently, implied the importance of the human factor while painting the picture of a bureaucrat in the following definition: "A bureaucrat is a man with a desk, an IN tray, an OUT tray, and a tray in the middle marked LBW (LBW standing for 'Let the b...... wait')". The bureaucrat—the administrator, feels as insecure as his minister-boss and thus holds tightly on to his power by creating a maze of rules and regulations, systems and procedures. The minister achieves the same purpose by formulating new laws and policy directives, and this he does as soon as he gets the seat of power.

Not fond of bureaucracy or democracy either, the best-selling parodist said that the best way to curb bureaucracy, was for a minister to repeal two laws before passing a new one. Similarly, he suggested that whenever there was a proposal to set up a new committee, the two existing committees should be abolished. Otherwise, promulgation of new laws only added to the confusion that prevailed owing to the existing ones and creation of new offices and committees only delayed decisions on an issue. Now, the feasibility of applying this Parkinsonian prescription also in practice will depend on how diplomatically the whole exercise could be handled by the government in power without antagonising its predecessors who were responsible for framing the prevailing laws and policies and without inviting adverse criticism from various other opinion groups and the society at large.

The 72-year old humourist sounded like an armchair authoritarian when he strongly advocated the practice of ruthlessness in the style of governance of a country. This particular view, he said, was the spontaneous outcome of an instinct that he derived from his association with the armed forces. The inherent authoritarianism in him was further confirmed when he vehemently opposed the practice of extending assistance to sick industries. "Let the industries which cannot look after themselves go bankrupt rather than surviving on government grants. Finish with such industries, bury them and start again" —these were his words.

If one attempted to rationalise on this assistance issue by bringing in the analogy of human sickness, it would be easily observed that sick industries could be classified into three distinct categories: (i) 'given-up' cases which have no chance of recovery and survival even with the best possible resuscitation intervention; (ii) those which are still not out of danger but not so serious as to preclude any chances of recovery; and, (iii) those for which the ailment is of a trivial nature—a little bit of discipline and timely check would help them to recover fully. While the Parkinsonian formula would be totally acceptable for the 'given-up' cases and also for the trivial ones (where it will not be insensible to leave it to the owners and the management to chart out and implement their own strategy for restoration of health), for those industries which would fall under the second category, intervention to provide the necessary health care would be considered as one of the primary responsibilities of the government. Apart from this rationale, there would be many more constraints in employing the ruthless authoritarian style—which explains why the British premier Mrs Margaret Thatcher's stance failed, when she tried to apply this approach.

But the Professor was perhaps right in one sense while advocating ruthlessness. It is true that people become more innovative when they are forced to look for new pastures. 'Necessity is the Mother of Invention'. Citing the example of British Leyland, Parkinson said that if it had been closed, an alternative and improved technology would have been developed benefitting the automobile industry as a whole. On the contrary, the British Government continued to pump more and more funds in and as a result of such charity which led to a feeling of security amongst the members of the staff, the company had not been able to bring about any basic change in the technology of the engine ever since the first car rolled out of its factory. Indians, by nature, being fatalistic and low in achievement orientation, to what extent the Parkinsonian hypothesis will hold good for India is a big question which Parkinson himself has answered. According to him, India should evolve her own theory on how to manage her industry instead of blindly copying the Western and Japanese models. For developing such a theory, the ancient Indian literature and culture as well as modern Indian experience of successes and failures should serve as excellent sources of ideas and information.

Dr Ganguli is corporate management and training adviser to many leading organisations.

COMMERCE

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EDITOR : VADILAL DAGLI
ASSOCIATE EDITORS : D. B. MAHATME
SUBHASH CHANDRA SARKER

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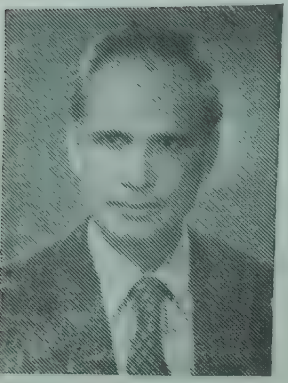
PEOPLE


Nambiar

Mr P. C. D. Nambiar, chairman, State Bank of India, has been unanimously re-elected chairman, Indian Banks' Association for 1981-82. Mr Nambiar is also a director of Industrial Development Bank of India, Agricultural Refinance and Development Corporation, Industrial Reconstruction Corporation of India and Industrial Finance Corporation.

Mr Laljeet Singh has been appointed managing director of Modern Bakeries (India) Ltd.

Mr P. N. Devarajan, who is presently chairman and managing director of Hindustan Organic Chemicals Ltd at Rasayani, has also taken over as chairman and managing director of the Indian Drugs & Pharmaceuticals Ltd. He succeeds Dr L. K. Behl. Mr Devarajan, who joined HOC in July 1977 as its general manager became managing director in October the same year and its chairman in 1978. IDPL, which is the largest public sector complex of its kind.

Devarajan

Irani

Dr J. J. Irani, who has been recently appointed a deputy managing director of Tata Iron and Steel Co Ltd, obtained his doctorate from the Sheffield University. He worked with the British Iron and Steel Research Association for five years before joining Tisco in 1968. Dr Irani, who will be based at Jamshedpur, was the winner of the National Metallurgists Day Award in 1974 and is also on the board of Guest Keen Williams Ltd and Bisra Stone & Lime Co Ltd.

Mr J. K. Bhuwalka, who is elected president of the Andhra Chamber of Commerce, has been in business for long, especially export of minerals. He is also intimately connected with the jute industry and trade. Mr Bhuwalka, who is the sole proprietor of Agarwala Trading Co, is also a director of South India Mercantiles Private Ltd and Sri Venkateswara Jute Spinning Mills Private Ltd. He is also actively associated with several trade and industry bodies.

Bhuwalka

Mehra

Mr Ganesh Pai has been elected president of the Kanara Chamber of Commerce and Industry.

Mr K. C. Mehra, who has also been appointed a deputy managing director of Tata Iron and Steel Co, will be based in Calcutta. He had joined Tisco in 1962 and after working in various positions at Calcutta and Jamshedpur he was transferred to Tata Services, Delhi, where he became resident director in 1977. In December 1978 he was appointed resident director of Tata Industries.

THE WEEK

The Union Government has decided to do a with dual pricing of on-shore and off-shore oil and fixed a uniform price of Rs 1,182 per tonne retrospective effect from July 11 this year. The p hitherto were, respectively, Rs 305 and Rs 475 tonne.

The Union Government has increased import from 12.5 per cent to 42.5 per cent in the case of types of edible oils viz, palm oil, rapeseed oil, s bean oil, sunflower oil and palmoleine oil. The c nut oil, however, has been subjected to a still hig import duty of 80 per cent as against 60 per previously. These duties will apply only to imp made by private parties and not to imports by S Trading Corporation. The step has been take mop up profits of private importers who have pla large orders abroad for cheap oils following runa prices in domestic oil markets.

The Finance Minister, Mr R. Venkataraman, declared that the Government has no intention reopen the special bearer bonds scheme even if it upheld by the Supreme Court. The writ peti challenging the validity of the scheme is now be heard by a constitution bench of the Supreme Co

All textile mills irrespective of whether they h their own draw-texturising machines or not will allowed to import partially oriented yarn (PC under open general licence, according to the Te Commissioner.

Japan will extend assistance worth Rs crores to India under an agreement signed in N Delhi recently. Of this, Rs 64.37 crores will be ject aid for expansion of telecommunication serv and second stage of Nagarjunasagar hydro elec station, and Rs 4.12 crores will be grant aid increase of food production and cultural and edu tional programmes.

Asian Development Bank has accepted from Government of India a further contribution of Rs lakhs ($280,000) to its technical assistance spe fund. This is India's seventh contribution to fund. India has thus contributed about one mil dollar towards the fund.

Wholesale price index

At 279.1, the latest available wholesale p index for the week ended June 27, 1981 did not s any change. However, at this level the index higher by 11.0 per cent than its level a year ag

Money comfortable

Conditions were comfortable in the Bon short-term money market as of Monday (July Both notified and commercial funds were renewe 8 per cent and the fresh money was transacte 7 per cent.

19 AUG 1981
C.F.T.R.I. MYSORE

COMMERCE

Why not joint sector electricity boards?

AT a recent meeting with the Union Finance Minister, Mr R. Venkataraman and the Union Energy Minister, Ir A. B. A. Ghani Khan Choudhury, the chairman of state lectricity boards (SEBs) were asked not to depend on e Central and state government subsidy but to find ays of generating internal resources so as to meet the eeds of their investment programmes. In view of the ounting losses of the state electricity boards such an dvice has not come a day too soon. It is too well known require reiteration that the finances of SEBs leave uch to be desired. During the five years ending March 979 their aggregate losses amounted to Rs 615 crores. his position further deteriorated when the revenue sses in 1979-80 reached a staggering figure of Rs 350 rores. A review of the financial position of the electicity boards by the Union Energy Ministry identified actors responsible for their poor performance. These re poor operational efficiency, uneconomic tariff strucure, transmission and distribution losses, arrears of evenue collection, delay in project implementation and ommissioning and poor accounting and management nformation system. These are almost the same factors s identified by the Committee on Power, headed by Ir V. G. Rajadhyaksha, former member of the Planning ommission, in its report submitted to the Union Governnment in September 1980. It may be noted that trade nion rivalries also play a strategic role in retarding the perational efficiency of some of the electricity boards. his is applicable in particular to West Bengal.

During the last two decades a number of committees nd working groups have been appointed to look into the verall functioning of SEBs and suggest remedial easures. The first such attempt was made in 1963 by working group set up by the Planning Commission. oon thereafter in 1964, the Venkataraman Committee ad recommended a gross return of 9.5 per cent on their apital. But during 1977-78, the latest year for which ata are available, only four electricity boards namely ujarat, Madhya Pradesh, Maharashtra and West Bengal ad earned a rate of return of 9.5 per cent and above. ven the 9.5 per cent return recommended 15 years ago nd supposed to give a net return of 3 per cent after roviding for interest charges (6 per cent) and transfer general reserve fund (0.5 per cent) cannot be regarded s adequate today if SEBs have to operate with financial ndependence. The contingent interest liabilities of the EBs to the state governments at the end of March 1978 mounted to Rs 1,000 crores.

On account of the shortage of funds with them. nly recently the electricity boards resorted to the large-scale postponement and cancellation of orders for electric conductors. Conductor manufacturers in turn did not honour their commitments of lifting stocks from aluminium producers. A number of SEBs informed the conductor manufacturers not to execute their orders till September 1981. The Gujarat Electricity Board requested not to make any supply to it before March 1982. Following this, producers of aluminium were burdened with swelling stocks of EC and CG grade metal. By March 1981 SEBs owed nearly Rs 100 crores to the conductor manufacturers and nearly Rs 60 crores to Coal India Limited.

The Rajadhyaksha Committee had submitted its report to the Government almost a year ago. Instead of acting on the expert panel's suggestions, the Government appointed a study team to look into the recommendations of the Rajadhyaksha Committee and suggest necessary action. It was only when the financial crisis of SEBs had its repercussions on other industries that the Government decided to convene a meeting of chairmen of electricity boards. At the meeting they were asked to evolve a rational pricing policy fully taking into account the escalation in the cost of generation from time to time.

It is interesting to note that out of 18 electricity boards for which data are available as many as 15 sold electricity below cost in 1978-79. Only three electricity boards namely Andhra Pradesh, Karnataka and Maharashtra sold power at average rates which were above the cost. Industries account for about 64 per cent of the total power consumption in the country and agriculture for another 14 per cent. Electricity boards are constantly under pressure from state govenments to supply electricity to agriculturists at subsidised rates. Of course, among the agriculturists the real beneficiaries of power subsidies are the big and more affluent farmers who are in a position to pay the actual cost of power supply. As regards supply to agriculture, states like Rajasthan, Bihar, Haryana, Punjab and Uttar Pradesh have shifted from metered supplies to flat tariff. Yet another problem bedevilling the finances of electricity boards is that of transmission and distribution losses. Some of the boards have recorded losses as high as 22 to 23 per cent on this account. Such losses also include thefts not only of power but also of equipment like transformers and switchgears.

State electricity boards are autonomous bodies working under the administrative control of the state governments and they are fully competent to take any steps including revision of tariff. However, in practice the autonomy of the electricity boards has been considerably diluted by the political expediency. The following remarks by the Rajadhyaksha Committee on the erosion of the autonomy of electricity boards are worth noting: "Under the Electricity Act the Board has been given wide powers, both financial and administrative, and does not need to seek the concurrence of the state government even in major items of capital expenditure, appointment and terms and conditions of service of all staff (other than the chairman and full-time members of the board), tariffs, revenue expenditure and so on..... In practice, however, the combination of a lack of job security of the full-time board members including the chairman and the need to go to the state government for loans even to carry on their day to day business, has helped to reduce the boards to a position of total subservience where the concept of autonomy, as it is commonly understood, has no meaning".

Important as it is to revise the tariff structure of electricity boards to help improve their finances, relentless efforts are required to be made to secure the maximum operational efficiency of the enterprises. During the Sixth Five Year Plan (1980-85) a little over Rs 19,000 crores—one-fifth of the total public sector plan outlay Rs 97,500 crores—would be invested for the developme of power. It is expected to create additional capac of about 20 million kw during the Plan period. Unl the working of state electricity boards is streamlin the past experience of fulfilling, nay even overfulfilli the financial targets without achieving the comme surate physical targets would be repeated. As it stan electricity boards are expected to make a negative cc tribution of Rs 22 crores to the financing of the Six Five Year Plan.

Here then is a depressing outlook for the financ health of the state electricity boards. *Commer* would, therefore, suggest that a time has arrived make structural changes in the organisational set up state electricity boards. A beginning can be made converting three or four well-managed state electrici boards into joint sector companies. The joint sect company will ensure not only autonomy but also business-like approach. It will also be free from gover mental interference. But more importantly it wou function not as a parasite but as a fruitful entity of t Indian economy.

No need to replace sales tax

THE reported statement by the Union Finance Minister, Mr R. Venkataraman, on his recent visit to Ahmedabad, that a committee would be appointed soon to consider the question of abolition of sales tax had given rise to an impression that the Government of India had decided to go beyond the brief provided by the conference of state chief ministers in New Delhi last February. It was then agreed that an expert body be set up to examine the issue of replacing sales tax with additional excise duty only on five commodities, *viz*, vanaspati, drugs, medicines, cement and petroleum products. It is good that Mr Venkataraman has now clarified the position at a meeting of the parliamentary consultative committee held in New Delhi last week. He rejected the demand for a total abolition of sales tax or its replacement entirely by additional excise duty and said that the expert committee's terms of reference would be restricted only to the five commodities that had been discussed earlier at the chief ministers' conference. As the Finance Minister has conceded the sales tax has proved the most important single and flexible source of revenue for the states. Between 1975-76 and 1980-81, sales tax revenue was estimated to have risen from Rs 1,943 crores to Rs 3,490 crores. As a result, even though the states' total tax revenue increased from Rs 3,546 crores to Rs 6,059 crores during this period the share of the sales tax in this total revenue rose from 54.8 per cent to 57.6 per cent. Any scheme to replace the sales tax by some other tax would have, therefore, to be carefully weighed.

The demand for the abolition of sales tax and its substitution by additional excise duty emanates mainly from trade and industry. It has been pleading for some time to extend the scheme to levy additional exci duty in lieu of sales tax which has been in force f over 22 years and covers cotton fabrics, woollen fabri rayon or artificial silk fabrics, sugar and tobacco inclu ing manufactured tobacco. Sales tax in the view business and industry causes hardships and the differe rates of sales tax in various states lead also to problen The states are not, however, enthusiastic about t scheme of levy of additional excise duty and, even the New Delhi meeting in February last, some oppo tion had been voiced to consider its extension to the fi commodities mentioned earlier. Right from the launc ing of the scheme, the states have been dissatisfied wi the inadequate exploitation of revenue potential additional excise duty so much so that the Fifth Finan Commission was asked to report the desirability otherwise of continuing the scheme of additional exci duty in replacement of sales tax. The National Dev lopment Council also considered the question and agre to the continuance of the scheme subject to certa conditions. They were that the *ad valorem* system excise duty be extended to all items except to unman factured tobacco, the incidence of additional excise du be raised to 10.8 per cent of the value of the clearanc and, while making the upward adjustments in bas excise duties, the Government of India should ke in view the ratio 2 : 1 between the yield of basic a special excise duty, on the one hand, and addition excise duty, on the other.

The Seventh Finance Commission has commented the "tardy progress" made by the Government of India implementing the agreement reached between it and t state governments in 1970. While the agreement stipulated that the incidence of the total excise duty be raised to 10.8 per cent of the value of clearances in two or three years subsequent to the agreement, the Seventh Finance Commission found that it had never reached that level and by 1977-78 it had dropped from 8.66 in 1973-74 to 6.82. The ratio between basic including special and regulatory auxillary duties and additional excise duty was also higher than 2 : 1 as provided in the agreement. Significantly, when the commission confronted the finance ministry officials with the complaint of the states, it was argued by them that fulfilment of both conditions would have implied a substantial increase in the rates of duties and it might not have been feasible to do so in the then prevailing conditions particularly during the acute inflation. Similar conditions prevail today perhaps in a more acute form. The experience of the states in the past can be repeated. Instead of seeking to switch over to the scheme of additional excise duty, New Delhi could as well draw, in consultation with the states, a model sales tax law which would cause the least hardship to business and industry and remove their complaints. This would ensure that the states are not deprived of their most flexible source of revenue.

Fresh burden on jute industry?

THERE are two views on the propriety of raising the statutory minimum of raw jute prices to Rs 175 per quintal which gives a jump of Rs 15 in a single year. One is that the increase is only symbolic. The grower has little chance of getting the benefit of this rise for there is still a chain of middlemen between him and the price support machinery called the Jute Corporation of India. Despite its best intentions the corporation has not been able to build up an infrastructure in terms of field staff and co-operatives that can help it to make purchases from the growers direct. The other view is that the increase of Rs 15 in a single year, though based on the recommendations of the Agricultural Prices Commission, has not taken the realities of the situation into account.

The statutory minimum for the grade (W-5) also acts as a reference price for the Jute Commissioner to fix rates for other grades, superior and inferior, and he has already done so for all other varieties. With the transport cost thrown in, the minimum average for the Calcutta market works out to Rs 240 a quintal, an extra Rs 22.5 for the jute mills to pay over the last year's cost. The jute mills which are already complaining of losing Rs 1,000 per tonne on an average or losing something of that heavy order on the basis of costs and prices prevailing before this year raw jute minimum price was announced, feel quite alarmed at the prospect of further additions to their costs. According to an industry estimate the recent series of price increase for the fibre will add on an average Rs 250 to the cost of making a tonne of jute goods and they will have to charge at least Rs 500 per 100 B Twill bags and Rs 190 for each 100 yards of hessian—prices which may be too high under the present market conditions. At the same time with the policy of credit restraint that the monetary authorities are pursuing the mills would not have enough funds to buy raw jute on a scale that alone can sustain the fibre price at the level that the Government desires for it through the statutory minimum.

The current year's jute crop is estimated to be a large one again though perhaps not of the previous year's order of 8.5 million bales but at least eight million bales or thereabout. A large jute crop for the fourth year in succession seems to belie the old crop cycle theory postulations of a bad crop year every three years, but large crops by themselves do not create much of a problem if, firstly, an adequate export outlet in available and, secondly, the quality of the fibre had been showing steady improvement. As neither of these has been happening and there is the additional complicating factor of a record 2.7 million bales carryover, the outlook for raw jute prices in the country remains very uncertain indeed. The real testing time will come a few months hence—between September and December to be exact—when the bulk of the crop will be arriving in the market in keeping with the progress of the harvest as well as to satisfy the cash needs of the farmer in the festive months that fall within this period. The Jute Corporation, The Reserve Bank of India and the mills will then have to do something to enable the farmer earn a remunerative price.

The problem of paying an economic price to the grower has been defying solution because the old policy of encouraging quantity production persists and nothing effective is being done to persuade the farmer to grow more and more of quality fibre. At least no organised effort worth the name has so far been made either by the industry which only keeps talking about it or by the Government which professes purely for political reasons its concern for the grower. It is true that millions of farmers' families are engaged in raw jute cultivation in the form of small-scale peasant farming and it would be a superhuman job to instruct them in better or more productive ways of cultivating jute. But many demonstration farm can be started to show the growers how intensive cultivation can benefit and the country. Funds can be had from international sources if domestic resources are not available. Bangladesh has taken money both from the World Bank and The Asian Development Bank to finance intensive jute cultivation projects. There is no reason why India cannot do the same. This country has been taking money from World Bank to fund a variety of projects. Jute can be one more. India should become a regular exporter of raw jute, however, small the quantity, and this will influence sooner or later a shift of emphasis to quality production from the purely quantitative one we have been following.

LETTER FROM KENYA

PAVAN SHARMA

Moi ends racial controversy

NAIROBI

ASIAN citizens of Kenya feel relieved of a great mental stress after President Daniel arap Moi advised those Members of Parliament who had stirred up a nation-wide racial line of thinking and demanded the Government to put the country's economy—which (according to them) was still controlled by Asians—into the hands of Africans.

The controversy had been raging in Parliament for a few weeks. At a mammoth public rally at Moi Stadium in Meru, President Moi said: "I don't need MPs who talk a lot like parrots that sing tunes they don't understand. I need MPs who are men of action... parrot-type rhetoric by some MPs was not the hallmark of leadership. MPs should concentrate more on their constituencies and stop going to Parliament to talk about issues they have not been instructed by their constituents. Members are free to raise issues concerning the development of their constituencies. But if you go now and charge that the Government did not do this or that—what have you done yourself? You go and jump around saying the economy of the country is not as it should be. Are you a leader of the *wananchi* (countrymen) in commerce?

"You can assist *wananchi*, but I don't need any person to come between me and *wananchi*. I want every *wananchi* (countryman) to know that he has his president who remembers him. If you (as an MP) do not look after *wananchi* and guide them properly, I will come to the help of *wananchi* because they are not yours. Someone pretends to talk of them as his people. If they are your people, what have you done for them? The people are the President's people. And since they are the President's people, if I see them mistreated, I go to their aid because I, as their father, am ready to go to their rescue."

Mr Moi recalled that he had promised to expose leaders who were not loyal. He said one leader had bragged about being in detention. "The only detention that was honourable for a person to boast about was that under the colonialists for fighting against colonial rule. But there is nothing for you to be proud of in talking about being detained for undermining your own Government—the Kenyatta Government. You were detained because you were seeking to incite *wananchi* so that there would be no peace—and then you come to boast that 'I am champion of the African cause'. What champion? Champion of devils?"

It may be mentioned here that all detainees were released by a presidential decree in December 1978 to mark the beginning of a new era, popularly known as *nyayo* (peace, love and unity) under the leadership of Mr Moi. Mr Martin Shikuku, MP for Butere, had been one of the detainees to be released, who recently demanded that the country's economy should be put in the hands of Africans. He is an assistant Livestock Development Minister. Mr Shikuku was supported in his stance that Africans must control Kenya's economy by Nakuri North MP, Mr Koigi Wa Wamwere. "*Wananchi* support Hon Shikuku one hundred per cent," said Mr Wamwere in Parliament amidst cheers from most members.

Mr Wamwere said: "There is a debate going on who should control the economy of the country. Even the newspapers which are run by foreigners have come forward abusing people like Shikuku because of their (people's) stand that the economy of the country should not be controlled by foreigners. It would be wrong for this House to keep quiet and let it be seen as if the control-of-the-economy issue is Shikuku's. We know that Kenya has *Wananchi* of Asian, European and African origin. But we must remember that colonialism stayed in this country for 70 years. During the colonial days, people in Kenya were divided into classes with Europeans being first class people, Asian second class and Africans the last. Those who fought for independence had a common aim that these positions should change when the country was free from colonialism.

"We want action which will give Africans the first position in this country. If you look at the population of this country, we form 98 per cent of it. Ninety-eight per cent of the people of this country are Africans and we must control 98 per cent of the economy," Mr Wamwere demanded. He said there was no way of convincing Afr cans were in forefront during th s'ruggle for independence with onl two Asians, Makhan Singh and Gam Pinto. "Africans fought to run thei economy and we don't want to see an person telling us other things. But w must correct one thing. The man controlling the economy of this country i the European," he said.

"We see only Asians because the are the people we are trying to compet with. In the real sense, the Europea is still on the top. We must mak effor's to see the economy in the hand of the Africans. I saw in a newspape today that those who have the capability will control more wealth. Thi wealth is produced by Africans. W are the farmers, cooks and we do al the work. And those saying we hav no right to control our economy ar not saying anything. It is our right t control our economy. When we speal of Asians and Europeans, we shoul not be taken as racists. If they ar *wananchi*, then let us eat together otherwise they are entirely hypocrites."

Mr Wamwere said a disease had crept into Africa which made people think that "we must depend on expatriates to develop". He said that even after many years of independence, some people felt Africans could not run their own affairs. "It is time for those who know they are Africans to say we are capable and experienced to run our own affairs. Colonialists sat on us for 70 years and that is why Africans had no experience. After independence, it is hoped Africans will be given a chance to get experience. If we keep on getting expatriates, we will never get any experience because it comes with patience," he warned.

At one stage the controversy led to a verbal clash between Mr Charles Njonjo, Constitutional and Home Affairs Minister, and Mr Shikuku. In his ruling over the control of the country's economy, Deputy Speaker, Mr Moses Kiprono arap Keino, said there must not be adverse external comment by members of anything actually said by other members during the proceedings in the House. There must also be no external discussion by members of

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EDITOR'S NOTEBOOK

Vadilal Dagli

IF Indian economy is ailing, public sector is the symbol of it. Whatever is deficient in Indian society is reflected in the working of public sector units. I believe that the Finance Minister, Mr R. Venkataraman, should present to Parliament the latest unitwise working results of public sector enterprises along with the *Economic Survey*. I am glad that a step in this direction has been taken by the Finance Minister who now has decided to undertake a quarterly review of select public sector undertakings. Mr Venkataraman made this announcement at a seminar on personnel selection and appraisal systems organised by the Bureau of Public Enterprises. Mr Venkataraman made an important point in his address when he said that, while profitability should not be the sole objective of the public sector performance, capacity utilisation and comparison of cost of production with standard costing were clearly identifiable and quantifiable standards of corporate performance.

According to the latest available data, in 1979-80 there was an overall loss of Rs 75 crores in public sector units in which nearly Rs 16,500 crores are invested. Even if we were to get a return of 5 per cent, the Government should have got the profit of Rs 800 crores and not a loss of Rs 75 crores. It s true that some units are making proits and some are making losses. For nstance, during 1979-80, 100 units made a profit of about Rs 463 crores while the balance 69 units made a staggering loss of Rs 538 crores.

There may be corporations like Air ndia which may have incurred a loss s an aberration. But there are culprits ke Coal India, Indian Iron and Steel Company, Fertiliser Corporation and Heavy Engineering Corporation which re on the sick list for quite some time. That as many as 100 public sector units re making profits is a matter of great urprise because the public sector is the most bureaucratised and politicalised conomic organisation in India. It is uled by irresponsible administrative ontrols by bureaucrats in Delhi who ave no business culture. They only now how to delay. On the other hand, oliticians interfere in the smallest posble detail and this is seen from the uestions that are being asked in Parament about the public sector. There ould be a national convention that cept in regard to profitability or other ajor problems the public sector should ot be discussed in Parliament. France has a large and efficient public sector, but the French Parliament does not discuss it in detail.

If a public sector unit does not make a profit then the chairman should be sacked. But today the chairman of a public sector unit is more worried about the mood of a junior bureaucrat or a junior minister in Delhi. Recently I came across a managing director of a public sector unit. He told me that most of his time was passed in Delhi in chasing papers. He was of the view that unless the Bureau of Public Enterprises is completely divested of all powers regarding the working of the public sector units, they will continue to ail. He gave one instance. Some papers connected with industrial relations in his unit were lying with the Bureau of Public Enterprises. "How can the Bureau of Public Enterprises which has no expertise on labour problems be given powers to lord over us about a matter which makes or mars production? My factory is in a shambles because industrial relations are deteriorating because of the inefficiency of the Bureau of Public Enterprises" he said. If Mr Venkataraman is serious about the working of the public enterprises he should first liberate them and make them autonomous. In my view, this can partly be done if some public sector units are made joint sector companies so that there cannot be any excuse for bureaucrats in Delhi to interfere in the day-to-day working of these units.

★

THE conservative economic policy of Mrs Margaret Thatcher which believes in creating unemployment to curb inflation is also responsible for unprecedented racial riots in the UK. High unemployment and particularly still higher unemployment among the black population created a time-bomb which exploded in the form of racial riots. Her ministers warned her about the coming crisis. The former Conservative Prime Minister, Mr Edward Heath, who is one of the outspoken critics of Mrs Thatcher's policy, recently warned: "If you have half a million young people hanging around on the streets all day you will have a massive increase in juvenile crime. Of course, you will get racial tension when you have young blacks with less chance of getting jobs". While the economic situation was grim for the black, the attitude of police was positively hostile towards the black citizens of UK. Out of about 25,000 policemen in London only 100 policemen are blacks. In Liverpool which was also rocked by racial riots, there were four black policemen out of a total police force of 5,000.

★

POLAND recently gave a royal reception to its most outstanding poet Czeslaw Milosz who returned to Poland after 30 years of self-imposed exile. Milosz who won the Nobel Prize for Literature paid a two-week visit to his country. All of a sudden he became a national hero. His name was taboo in Poland and his poems were never published in that country. When the 69-year old poet returned to a new Poland, the Polish people showered him with uncontrollable love and affection. A member of his family explained this outburst of life which was also an expression of defiance against the totalitarian rule in these words: "Poles have a strong need for symbols at the moment, for leaders other than from the party. Hence Walesa, the Pope, Wyszynski and Milosz". Mr Milosz feels that this is in the Polish tradition. In the 18th century the Romantic poets wrote from the exile and kept the Polish language alive and nationalism burning, Mr Milosz said: "It goes back to Polish literature, this peculiar place of a Polish bard. It is a motif from the past-poets who formulated collective aspirations. The paradox is that I am a private person and I am thrown into a role that is contradictory for me."

Mr Milosz was a cultural officer in Polish embassy in Paris who cut his ties with the Communist Party and lived in Paris until 1958 and then settled permanently in the United States where he is a professor of Slavic literature at the University of California in Berkeley. He composes his poetry in Polish language only. He says "language is the only homeland". The Polish Government publishing houses have started printing his verse but not his essays, particularly a collection of his essays titled *Captive Mind* which discusses totalitarianism and which remains still banned. Milosz's verse was inscribed in a monument created in honour of the workers who died in police firing in Poland. It was not accidental that Milosz became quite friendly with the Solidarity Leader Lech Walesa. The poet was asked whether he would write about his experiences of Poland 1981. His reply was "My present goal is to survive".

PAKISTAN
NEPAL
INDIA
BURMA
BANGLADESH
SRI LANKA
MALDIVE ISLANDS

SOUTH ASIA REVIEW

Bangladesh: Economic cost of Zia-ur's assassination

From A. ZAKERIA SHIRAZI and ARSHED MAHMUD

DACCA

THE departure of President Zia-ur Rahman from the scene of Bangladesh has, at least temporarily, put the country off the development track. Though there has been no major shift from the policy initiated by the late President the concerned circles are already expressing doubts about its implementation.

The prospects of foreign aid which plays vital role in the country's development planning is also not beyond doubt. The implementation of Second Five Year Plan (SFYP) depends on the receipt of 60 to 65 per cent foreign aid.

The total outlay earmarked for the 1980-81 annual development programme (ADP, first fiscal year of the five year plan) was Taka 2,700 crores (Taka 100 is equivalent to Rs 49). But the amount was slashed to Taka 2,369 crores. This was due to the shortfall in foreign aid anticipated as well as the shortfall in mobilisation of internal resources. Other reasons being the refixation of pay for the government employees and extra payment made on import of oil after the price-hike.

However, to compensate the 1980-81 annual development programme the ADP for 1981-82 has been sized at Taka 3,150 crores registering an increase of about 27.27 per cent in total development expenditure over the last financial year. The 1981-82 ADP also may fail to achieve the target.

It is learnt that the total outlay of Taka 20,215 crores (based on 1979-80 constant prices) in the second five year draft plan is being revised to almost half the size due to the lukewarm response of the donor countries in financing the second five year plan and the hyperinflationary pressure. It is not yet clear what strategy has been adopted by the Ministry of Planning to attain the target despite downward revision of the public sector outlay in financial terms during the plan period. However, a Planning Ministry source said, "we still bank upon the donors' good wishes".

The ambitious Second Five Year Plan was launched on July 1, 1980 with a major thrust on rural development and agricultural production. This is largely because agriculture contributes about 60 per cent of the country's GDP earning, the share of industry being only 10 per cent.

The Second Plan could not be initiated just on the heel of First Plan (1973-78). As the world inflationary and recessionary conditions continued to cast doubts on the prospect of aid, it became clear before the end of the First Five Year Plan that a Second Five Year Plan could not be launched just after the end of First Plan. Besides, past commitments were too large to be matched by available resources, and, too inflexible to make a Second Five Year Plan meaningful. Taking these aspects into consideration a two year plan (1978-80) was launched with emphasis on completing as many of the on-going projects as possible within the available resources. Again the targets could not be attained due to resource constraints, both foreign and internal.

During first plan period, the GDP increased at an average annual growth rate of 4 per cent as against the plan target of 5.5 per cent. The GDP growth rate during the two year plan stood at 5.5 per cent as against the projected rate of 6.1 per cent.

The total SFYP financial outlay of Taka 25,595 crores includes gross investment and working capital requirements of Taka 20,010 crores and non-investment development outlay of Taka 5,585 crores Non-investment development outlay includes such items as subsidy on fertiliser and seeds, cost of land acquisition, interest and amortization, if any, wages and salaries of some service-oriented promotional activities, and *ad hoc* recurring expenditures of certain agencies lingering in the development budget. Gross investment of Taka 20,010 crores is to be financed by net inflow of external resources of Taka 13,880 crores (about 66 per cent and domestic savings of Taka 6.130 crores. It is to be noted that domestic savings are less than required domestic financial resources by the amount of non-investment outlay envisaged in the plan. Including the latter the amount of total domestic resources required for the plan is Taka 11,715 crores.

Significantly, following the Government's stated policy that the private sector would be given emphasis the total allocation for this sector has been estimated at Taka 5,470 crores (investment Taka 52,000 crores and non-investment Taka 270 crores). The share of private sector now stands at 22 per cent. In the first plan it was 11 per cent and in the two year plan 16 per cent.

Since the Second Five Year Plan relies heavily on foreign aid, the attitude of donor countries will materially affect it. It was expected that foreign aid comnitments at the beginning of the financial ear (July 81-June 82) would stand at hree billion US dollars. Out of the mount the consortium pledged 1.7 biiion dollars at its recent meeting in Paris. Donors are reportedly unhappy with the id utilisation position of Bangladesh. Out of 10,700 million dollars mobilised s external assistance up to 1980-81 Bangladesh utilised only 7,800 million dolars.

President Zia's death has sparked the ear that the rural institutions like *gramarkar* (village government) and youth complex created by him as the prime force of rural development will crumble. There is no leader in Bangladesh Nationalist Party (BNP) who possesses the charisma and image of President Zia to be able to unite the village people and drive them to effect any major change in rural economy and life-pattern.

President Zia, after assuming power, came to understand through extensive tours in villages that the development of the country depends mainly on rural development. He brought major changes in the approach of rural development. The initial top-down approach, a highly centralised bureaucratic planning process, was discarded. Instead a bottom-up approach was taken. In this process decentralisation of power was to be achieved step by step.

In earlier top-down approach the

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Joint inspection teams for Indo-Pak border

INDIA and Pakistan are again in a state of military confrontation. Foreign press reports are predicting another war between them this winter, after an interval of ten years. Troop movements on either side of the border reinforce these fears, as do delayed reports of exchange of small arms fire in which men have been killed on both sides. The question of who fired first is almost impossible to answer, since local commanders have been authorised to return fire without awaiting permission from Army Headquarters, as was formerly the case.

While the delay inherent in seeking the permission from New Delhi or Islamabad to respond to provocations from across the border was frustrating and sometimes defeated the purpose of counter-fire, it did discourage junior officers on the spot from responding to, and occasionally initiating, border incidents. Today, a stray shot fired across, or even near, the long border stretching from Kashmir to Sind can (and is known to have) touch off increasingly heavy retaliatory fire until heavy machine-guns and artillery are ordered into action to quell the other side. It is at this stage that brigade or army headquarters learn of the clash and interven to stop it. Obviously, much less damage would be done to life and property — military as well as civil — if the delay is endured and authority to fire across the border limited to the senior officers who now have to intervene to end it.

With troops and heavy equipment deployed on either side, the danger that a stray shot or shell may ignite an all-out war cannot be ruled out. If the political leadership in New Delhi and Islamabad is also suspicious of the other's intentions, the foreign press predictions may turn out to be correct.

Fortunately, Mrs Gandhi has put an end to the most nightmarish of these war scenarios : of an Israeli-style pre-emptive attack on nuclear reactors and other equipment that can be used to fabricate nuclear weapons by the deep penetration strike jets that the air forces of both countries now possess or are in the process of acquiring. She categorically denied reports that India had embarked on a nuclear weapons programme and reiterated the national commitment to use nuclear energy only for peaceful purposes. Asked specifically whether India would change this policy if Pakistan went in for a nuclear weapons programme, the Prime Minister said : "We do not believe in the deterrence theory. I do not know how it will help if we also make nuclear weapons."

By **AJIT BHATTACHARJEA**

Such a categorical assurance, going far beyond any previous commitment, that India will not be provoked into entering the nuclear weapons race even if Pakistan is foolish enough to enter it, should block the efforts of nuclear weapons export salesmen throughout the world to inject nuclear confrontation into the subcontinent. Even General Zia-ul Haq need no longer act scared when reports of alleged Indian preparations to make nuclear weapons are placed before him. The designs of the hawks on the Indian side of the border will be equally frustrated.

While the line between nuclear and conventional weapons is distinct, it is not wide. With the threat of a nuclear war between India and Pakistan removed, therefore, the need to go in for sophisticated conventional weapons designed to destroy reactors and other specialised targets associated with nuclear weapons production also disappears. In the case of Pakistan, this would remove the justification for going in for the American F-16s that were used by the Israeli air force to destroy the Iraqi nuclear reactor being constructed near Baghdad. In the case of India, it should remove the justification for increasing the number of the recently purchased Jaguar deep penetration strike aircraft as well as for negotiating the purchase of the sophisticated mirage — 2000, which is yet to go off the ground, but is already being hawked round the world by French arms salesman anxious to exploit the fears of antagonistic governments.

The same process of de-escalating weapons systems could and should influence the purchase of the latest tanks, artillery and armoured carriers by India and Pakistan in the fear that they will be needed to counter an offensive by the other side. The same procedure could extend to limit the acquisition of naval vessels intended for use against each other.

The logical conclusion of mutual measures to end the threat of another major war in the subcontinent would be for each country to evolve a system of posting joint inspection teams at incident-prone places on the border and at the headquarters of formations set up by each country to defend itself from attacks by the other. Similar arrangements could be made at police and civil administration offices near the border. Then the de-escalation would be creditable to both sides and the huge funds India and Pakistan are spending on defence, as well as their dependence on great powers for the latest arms, could be ended. The border could then be as peaceful as that between the United States and Canada or France and Germany.

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meagre agricultural production that took place benefited the large and medium farmers and land owners who form the core of the village power elite and have kinship relations with the urban power group entrenched in politics, bureaucracy, commerce and industry. This investment and industry-oriented strategy assumed that the benefits of development will trickle down to the rural masses through market mechanism. But the strategy proved wrong because of distorted market situation.

In order to double food production President Zia embarked on a tough but promising canal digging programme through voluntary labour. Whether as a result of canal digging or not the food production in 1980-81 has increased significantly. It is estimated that the production (the final account yet to be prepared) will be around 150 lakh tonnes (136 lakh tonnes of rice and 14 lakh tonnes of wheat). In 1979-80 financial year the production stood at 130 lakh tonnes.

As the agriculture sector provides the major share in GDP the growth rate of the gross domestic product for the current fiscal year has been estimated at 7.6 per cent. The growth rate is 0.4 per cent higher than the projected growth rate of 7.2 for the fiscal year 1980-81. But as the projection stands now the enthusiasm that was visible in rural areas appears to be dying down after the death of Zia-ur Rahman.

The activities of *gram sarkar* and *jubo* complex are reported to have been confined to paper works. It is most unlikely that these institutions which came under heavy fire during Zia's lifetime for their alleged repressive activities in the village, can continue without its godfather. The opposition attacked the creation of these institutions saying that President Zia had been trying to perpetuate one man rule in the country.

The foreign investors are also having a second thought after the assassination of President Zia. The President who brought a semblance of political stability in the country during his tenure, succeeded in attracting foreign investors to invest in Bangladesh. He visited many industrialised countries to make the foreign investors understand that favourable investment climate prevailed in the country. To encourage the foreign investors an export processing zone (EPZ) has been created and the industrial policy liberalised. The investors appeared to have been convinced and the response was quite encouraging. Mr Jamaluddin Ahmed, the Minister for Industries, has, however, claimed that the foreign investors have not cooled off.

The prospect of external assistance is likely to wither. Though there is no immediate reaction from the donor countries, the Muslim world, particularly Saudi Arabia, is rethinking about their commitment. If this country in the days to come does not take a fundamentalist swing the Muslim countries will not show interest. This was the remark made by a high official of the external resources division of the Ministry of Finance.

From December 16, 1971 to June 30, 1980, the total amount of aid committed to Bangladesh has been of the order of 9,221.2 million dollars of which 2,143.9 million was on account of food, 3,167.8 million on commodity aid and 3,909.5 million project aid. Over the years aid commitment has changed in size and composition. Towards the end of Zia-ur Rahman's tenure Bangladesh received foreign aid in large volume as grants and soft term loans. Obviously, the country's planning, rural development, foreign aid and investment entirely depends on the political stability. A void has been created and the political scenario has taken a fluid shape. The opposition which appeared to be ineffective during Zia's time is now gaining ground. And they are demanding to revert back to the 1972 constitution which provides for the parliamentary form of government. But the ruling party is determined to stick to the presidential form. With only two months ahead for the presidential election (September 21) no major political party apart from BNP has yet confirmed its participation. In this situation only time can tell whether Bangladesh will have political stability or another phase of turbulence.

Pakistan's expansionary budget

By B. M. BHATIA

PAKISTAN Federal Government Budget for fiscal 1982 (beginning July 1, 1981) shows an overall increase in public expenditure of 14 per cent over the last year. The increase in current expenditure is 17 per cent and that under capital account 9.8 per cent. The principal increase in the current account is under "defence services" where expenditure has been jacked up from Rs 1,450 crores in the budget and Rs 1,528.4 crores in the revised estimates to Rs 1,771.2 crores which mean an increase of more than 22 per cent over the last year's budget figure under the head. The budget shows an overall deficit of Rs 927.4 crores, a part of which is proposed to be made good by raising taxes and prices of state-produced commodities. The net deficit left uncovered comes to Rs 544 crores which is to be met by borrowing from the banking system or deficit financing as it is called. The Finance Minister has justified this level of deficit financing on the ground that being less than 2 per cent of the GDP, it falls within what he regards as "safe limits from the point of view of monetary and price stability".

The current revenue receipts of the Federal Government are put at Rs 4,247 crores and current expenditure at R 3,694.3 crores. That leaves a current revenue account surplus of Rs 552.7 crores On capital account, the total receipts including the surplus available from current account for financing the Annua Development Plan (ADP) come to R 2.032 crores and the total outlay is estimated at Rs 2,959.4 crores which leave the total budget with an overall deficit o Rs 927.4 crores. The budget propose liberal pay hikes in the form of dearnes and compensatory allowances to government servants which will cost the exchequer Rs 167.3 crores. That increases th budgetary deficit to Rs 1,095 crore Against that, however, it is proposed t make an economy cut of 6 per cent o government expenditure and 2.5 per cen broad cut on the ADP. This will result i a saving of Rs 169 crores to the exchequer. It is to be noted that practicall the entire amount saved through th economy cut is going to be absorbed b the proposed increased largesse from th public exchequer to the government employees. That shows the attempt on th part of the ruling elite to keep the civ and military bureaucracy satisfied eve at the cost of expenditure on development and beneficient activities of th government.

Prof Bhatia is a close student of Pakistan's economy.

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The main heads of expenditure under the current account together with their budgetary provisions for 1981-82 are : general administration, Rs 197.1 crores; defence services, Rs 1,771.2 crores; law and order, Rs 114.9 crores; subsidies, Rs 184.4 crores; and debt servicing Rs 889.3 crores. These five heads account for 85 per cent of the total current account expenditure with defence alone accounting for nearly 48 per cent of the total. The three heads of community services, social services and economic services (excluding subsidies) account for the rest of the 15 per cent of the total expenditure. The distribution of public expenditure reflects the nature of state in Pakistan : it is a military and police state rather than a welfare state which, in modern times, is considered to be the ideal form.

On the capital side of the budget, two remarkable features are the colossal dependence on foreign aid for meeting the developmental expenditure and the cuts exercised in the outlay on agriculture and industry in the ADP. Of the total capital receipts of the Federal Government in 1981-82 of Rs 2,032 crores, the share of "External Assistance" or foreign borrowing is Rs 1,420.6 crores. This means 70 per cent of the available budgetary resources for developmental expenditure are to come from foreign aid. Apart from the fact that dependence of that order on foreign resources for supply of funds for developmental purposes jeopardizes the independence of country's foreign policy, it all imposes intolerable future economic burdens on the community.

Most of the so called foreign assistance is of the nature of foreign lending to the country at concessional rates of interest. The aid, therefore, means addition to debt burden of the nation and annual debt charges. The foreign debt of the country already stands at over $ 8 billion compared to a little over $ 6 billion four years back at the time of overthrow of Bhutto. The annual debt charges of the country stand at Rs 889.3 crores at present. Repayment of foreign debt is scheduled to cost the exchequer another Rs 605.3 crores in 1981-82.

Already carrying such a heavy load of debt round its neck, a prudent government should be eschewing all further borrowing unless it were necessitated by reasons of very survival of the nation. In the present case, easy access to foreign credit made possible for it by the Afghan crisis seems to be the only reason for profligacy of public spending that the Finance Minister has indulged in. The other remarkable point to note in the budget is that amidst heavy increase in defence and other types of non-essential expenditure, the public outlay on agriculture and industry, the two main commodity production sectors of the economy, has been cut down. Thus against a provision of Rs 315.6 crores on agriculture in the 1980-81 ADP, the corresponding figure for 1981-82 is Rs 293 crores which is 9.4 per cent less than last year. In industry the cut is even more drastic, from Rs 397 crores to Rs 293 crores which means a decrease of 30.6 per cent.

It is obvious that the budget is going to be inflationary in its impact. In the first place, the heavy dose of deficit financing comes over and above 13 per cent rate of inflation already raging in the country. Secondly, the increases in the prices of essential basic consumer goods like wheat, wheat flour, sugar, lubricants oils, and cement will add to the inflationary effect of deficit financing on the general price level. Thirdly, while larger home remittances add to the foreign exchange, their general impact on domestic prices has begun to prove inflationary. This is because with a view to encouraging inflow of these remittances, several fiscal concessions and incentives have been offered. The result is that about two-third of these remittances have come to be used for import of luxury import goods. The increase in remittances in Pakistan has, therefore, continued to be accompanied with rise in consumer demand for various consumption articles and rise in prices.

For the fourth year in succession, Pakistan's economy has registered significant gains in production. The growth rate of GDP in 1980-81 was 5.7 per cent. The average annual growth rate for four years from 1977 to 1981 works out at 6.2 per cent which by any reckoning is highly impressive. The high growth rate of the economy has, however, failed to keep inflation in check. Prices have shown a steady rise over the last three years. As against 7 per cent increase in wholesale price index in nine months period from July to March in 1979-80, the rise in corresponding period of 1980-81 was 10.5 per cent which gives an average annual inflation rate of 13 per cent. This shows that the earlier relatively modest level of deficit financing was able to generate so much of extra demand pressures in the market that even over 6 per cent growth of gross domestic product proved inadequate to keep price stability. With increased amount of deficit financing and a probable slowing down of growth rate of the economy, inflation rate is bound to go up still further.

The seeming prosperity reflected in the high growth rates of the economy in the last four years, is illusory. Basically the country's economy remains weak and unbalanced. The Finance Ministry itself, through its annual *Economic Survey*, draws pointed attention to the structural weaknesses of the economy. At the end of the first chapter dealing with the state of the economy, the *Economic Survey* for 1980-81 says : "Despite high sustained growth, the economy continues to face several structural weaknesses. Agricultural yields remain low compared to many developing countries as well as our potential level. Industrial efficiency, though improved recently, falls short of satisfactory level. The saving-investment gap stands at an uncomfortable level and compels the government to seek external resources. Public finances still require high levels of external and domestic borrowing. The balance of payments deficits are high: the debt service burden is likely to grow: exports are vulnerable to rice and cotton production, imports to prices of energy and manufactures and home remittances to several extrageneous factors. Fundamental obstacles to longer term growth, such as rapid population growth and illiteracy, remain to be tackled."

One could not improve upon this summary of problems facing the Pakistan economy. The budget does nothing to correct these weaknesses or remove these imbalances, to put the economy on sounder footing and stable growth path.

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Intensified search for gas and oil

From ARVIND BHANDARI

NEW DELHI

SINCE oil and gas go together as major sources of fossil energy, the notable advances made by India in gas production are a matter of gratification. The gas production in 1980-81 nearly doubled compared to that in the previous year, going up from 363 million cubic metres to 673 million cubic metres.

And now the Oil and Natural Gas Commission has added a new feather to its cap following the recent commissioning of the liquified petroleum gas plant at Uran near Bombay which will convert natural gas into LPG through a cryogenic process. At full capacity, the production of LPG will be 180,000 tonnes per year. This would mean a daily output of about 38,000 cylinders. The estimate is that 2.5 million new connections for domestic gas will be given in the next two and a half year. The LPG plant will pipe its produce to Bharat Petroleum and Hindustan Petroleum for bottling and marketing. The ONGC has plans to set up two more LPG plants at Hazira and Tapti.

• India is giving as much importance to gas as to oil. Much of Gujarat's prosperity, for instance, depends upon gas. The new chain of fertiliser factories being planned in the region will also be based on supply of gas. The gas available at the Uran terminal would go up once he South Bassein gas fields are tapped. As for the major gas fields discovered so far in the Bombay off-shore area, it is estimated that these are capable of sustaining a production of 25 million cubic metres per day for 25 to 30 years.

A significant development is that, apart from Bombay and Gujarat, hopes are arising of gas discoveries in the eastern region. Gas structures were recently discovered in Andamans and Portonovo. Possibilities of both oil and gas have emerged in West Bengal and nearby areas after the explorations of the Soviet oil expert, Professor Kalinin.

The work on oil exploration by the ONGC has, meanwhile, been gaining momentum, especially in Bombay High. The Bombay High production of oil aggregated about five million tonnes in 1980-81. It is proposed to be raised to 8.4 million tonnes during the current year. By 1984-85 the output will be 13.2 million tonnes. The authorities are confident of a further increase in production if the proposal for transfer of technology from the Compagnie Francaise Petroles, which is generally called CFP, materialises. According to latest reports, an agreement has almost been reached under which the French consultants will renew their contract for technical assistance in the development of Bombay High reservoir and its satellite structures. The earlier four-year contract between ONGC and CFP ended in April this year. The agreement envisages supply of technology for water injection, gas injection and repairing of wells. Certain criticism voiced earlier no longer holds good because the original proposal of oil sharing has been dropped.

The ONGC has chalked out an ambitious programme for oil exploration, both on-shore and off-shore. Its plans for 1981-82 include seismic surveys of 20,000 line kilometres, drilling of 20 exploratory wells and 39 assessment wells and construction of 14 new platforms. As a result of extensive drilling, the ONGC has already found new areas with rich potential. Recently oil was found in the Godavari structure. The Commission has drawn up a 350 million dollars development plan for the Godavari off-shore basin which envisages a World Bank assistance of 120 millio dollars. In fact, the ONGC has sough from the Government an additional a location of Rs 1,000 crores for th Sixth Plan period to establish a co siderably higher production potential c 19 million tonnes from the off-shor areas of the Arabian Sea. Earlier th output from Bombay High by the en of the Sixth Plan period had been pro jected at the rate of 12 million tonne per annum.

The exploration drive will gain fur ther momentum when the foreign oi companies bring in their money an technology and launch operations. Th Government has, however, slightly stag gered the exercise of selecting the com panies. The Petroleum Minister, M P. C. Sethi, recently announced that th Government would start afresh the exer cise of selecting foreign companies. A second round of talks is being held i the Petroleum Ministry by including some of the oil companies which were left out when 35 of the 67 companie were shortlisted.

Since the bids received were not as many as expected, the Government wil also re-demarcate the 32 blocks — 15 offshore and 17 onshore to make the blocks more attractive to foreign bidders. The Government, it seems, wants to add some potential oil bearing areas to those blocks which the foreign oil companies now consider unattractive.

The Government is also thinking of dividing the existing Godavari basin, a highly prospective area into two blocks —shallow and deep. The shallow block will continue to be drilled by the Oil and Natural Gas Commission and the deep block will be allotted to foreign companies. The ONGC has been finding it difficult to drill in the deep waters of Godavari due to strong ocean currents and adverse weather conditions. A well drilled offshore costs the ONGC Rs 6 crores.

The need to stagger the selection of foreign oil companies has reportedly arisen because of continuing disagreement on the question of how to share the oil find, if any. The Petroleum Ministry's position is that the foreign companies would be allowed oil-sharing with India having the option to buy their share at international prices. Evidently, some companies have lingering reservations on this score. Hence the limited number of bidders. A reliable source in the Petroleum Ministry tells me that the finalisation of selection of the foreign companies will take quite some time more.

More aid for Sri Lanka

From **DALTON DE SILVA**

COLOMBO

THE Sri Lanka Aid Group, which met in Tokyo under the aegis of the World Bank on June 30 and July 1, has pledged assistance to this country to the tune of $US 834 million.

This, the 17th meeting of the group, held under the chairmanship of World Bank vice-president David Hopper, was attended by the group's members —USA, UK, West Germany, Japan, France, Canada, Australia, Netherlands, Sweden, Denmark, Norway and Italy.

Austria, Switzerland, Belgium and India attended as observers. Representatives from aid giving agencies, the World Bank, the International Monetary Fund, the International Fund for Agricultural Development, the Asian Development Bank, the United Nations Development Programme, the Organisation of Petroleum Exporting Countries and the Kuwait Fund were also present.

Normally the Aid Group meetings are held in Paris. This is the first time it met in an Asian country.

A Finance Ministry official said that taken as a whole the aid pledged this year was slightly more than last year. This is a signal achievement for Sri Lanka as the climate for foreign aid is extremely unfavourable and the leading industrial nations hvae all drastically reduced their foreign aid budget, the official said.

The delegates at the meeting expressed their confidence in Sri Lanka's economic policies and development programme. They, however, expressed some concern about the budgetary deficit in the current account in the balance of payments, the official said. They also drew attention to the poor performance of the plantation sector, need to increase both production and exports, and the need to keep a tight control on expenditure to prevent the type of deficit that arose last year due to a flood of supplementary estimates from various ministries.

The official said that the delegates expressed satisfaction about the steps taken to prune expenditure and to keep Sri Lanka's investment programme within available resources. They also expressed the hope that effective steps would be taken to increase domestic resources by widening the tax base and increasing revenue to meet the expenditure needs of the investment programme for 1981 to 1985.

Sri Lanka's Finance and Planning Minister, Mr Ronnie de Mel, who led the country's delegation presented to the meeting the "Public Investment 1981-1985" programme.

He told the delegates that unlike in the past, Sri Lanka's need for aid this year was not to start new projects but for budgetary and balance of payments support for completing on-going programmes. It was better to complete the on-going projects as early as possible and to think of embarking on any new projects only when these projects were completed.

The Minister said that when the present Government took office in 1977, it inherited a totally run-down and stagnant economy. Unemployment was over 20 per cent of the workforce. The private sector was emasculated by a doctrinnaire approach and hamstrung by threats of nationalisation and a proliferation of quantitative, price and other meaningless, administrative controls.

There had been a good response to the policy reforms adopted by the present Government since 1977. Under these reforms the exchange rate was unified and allowed to float, most imports and payments were liberalised, price controls were dismantled and the tax structure was simplified with appropriate incentives for investment in high priority areas. Food and other subsidies, which were widespread and had been in operation for nearly three decades, were rationalised by removing them from the more affluent classes and targetting them towards the poor, while restoring market incentives.

"We have been able to build up in a relatively short period a climate of confidence in which the private sector can invest and in which the public at large is viewing the Government's policy stance as a serious attempt to move away from the past", Mr de Mel said.

Following these policy changes the economy had grown in all sectors. But factors beyond the control of the government have led to a deterioration of the economic situation.

It is a tragedy that such factors threaten to jeopardise the country's development programme which is vital to solve the pressing problems of unemployment and poverty, the Minister said. The Government was, however, determined to maintain the free and liberal economy which it had encouraged and realised that current trends in public sector finances, inflation and the balance of paments were not compatible with this goal.

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Accordingly the Government had taken a number of steps to improve public sector finances and the balance of payments, the most important of which had been a curbing of public sector expenditure.

Throughout the year 1980 the Government took serious steps to adjust to the emerging situation. The prices of essential commodities like rice, flour, bread, sugar, petroleum products including kerosene and milk foods were increased.

"These were most difficult political decisions", the Minister said. "The tragedy", he said "is that the adjustment towards international prices has become for Sri Lanka a case of shooting at a moving target. Each time we take steps to adjust to increased import prices at great sacrifice to our people, we only end up facing a further increased and a further need to adjust".

The Minister said it was almost an impossible situation to live through and, as if these price movements were not harsh enough, the developed countries were beginning to erect quota barriers against Sri Lanka's relatively insignificant industrial exports.

In these circumstances the first steps towards a re-examination of the public sector investment programme were taken last year leading to a reduction and hanges in the capital budget for 1981. The new capital expenditure by Government envisaged for 1981 was a modest investment of Rs 12,041 million. Public investment in 1981 to 1985 was a greatly reduced programme with its share in GDP declining from 16.6 per cent in 1981 to 11.7 per cent in 1985.

The Finance Minister said further reductions to Government's capital expenditure did not seem feasible or desirable. Nearly 90 per cent of the items in the investment programme had some concessional aid in them.

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Panchayat opponents asked to join mainstream

By **BRAHMANAND MISHRA**

IN course of his address from the throne to the Rashtriya Panchayat recently, King Birendra called upon his subjects to forget petty interests and narrow outlook and join the mainstream of the partyless panchayat system which he described as a broad-based democratic system. This was the first address of the Nepalese King to the House comprising members directly elected by the people couple of weeks ago in general elections. The King spelt out in detail his government's programmes for the new fiscal year starting this month, and expressed his hope that the political stability achieved with the installation of responsible government would help mobilise the manpower and resources of the country for national development and reconstruction.

The major portion of King Birendra's speech was devoted to the steps his Government would take to improve the economic condition of the country. He said: "Our new steps towards strengthening democracy will be meaningful only when the economic development of the country for the welfare of entire Nepalese people is achieved". He appealed for unity to achieve this "noble task".

Referring to the present economic scene, King Birendra said that decline in agricultural production, deficit in foreign trade and increase in monetary circulation in the past few years had undesirable effects on the general condition of the people. However, the gross national product had increased during the current fiscal year and the increase in food production was a matter of "satisfaction". He went on to add that many problems still confronted the country and there was no alternative to achieving self-reliance.

Launching of a concrete economic programme, "as a campaign", making tax assessment simple and scientific, taking steps to increase food production, utilisation of huge water resources and launching programmes to stabilise market prices and ensure supply of consumer goods and construction materials were some of the steps King Birendra listed which his Government would be taking to improve the economic situation.

In this context, King Birendra also referred to the new industrial policy outlined recently to encourage the private sector by making the atmosphere for industrial investment more congenial, simple and favourable. Participation of foreign investment and the private sector will be encouraged for ensuring self-sufficiency in consumer goods and construction materials and in the establishment of import substitution and export promotion industries.

It was widely appreciated that the Prime Minister, Mr Surya Bahadur Thapa, at the first opportunity said that it would be his Government's endeavour to bring into the mainstream those outside the partyless panchayat system. It would seem that the Government would be tolerant of their activities so long as law and order was not disturbed in the country.

If what several members of the House have stated is any indication of the people's needs, the Government would have to go about with much more vigour and dedication than before. According to the members, production-oriented agricultural development programme, increased irrigational facilities, transport facilities, cottage industries, facilities for higner education, roads and bridges and horticulture development are the people's requirements.

It has been pointed out to the Government that there is widespread discontent among factory workers, peasants, teachers and people working in various services.

The Government, on its part, has shown its awareness of the magnitude of the task facing it. It has decided to tone up the administration and has created labour and social welfare and civil supplies ministries and reorganised other ministries. Soon an administrative staff college is also proposed to be set up.

Dr Yadav Prasad Pant, the Kingdom's noted economist who is now a cabinet rank minister holding the portfolios of finance, commerce and civil supplies, has brought home to the Government that development of management is *sine qua non* for social and economic progress.

It has been made amply clear that high sounding economic programme outlined by the Prime Minister needs to be translated into actual deed. "The new council of ministers bears important responsibilities. It must dedicate itself to the task of national reconstitution', an official vernacular daily, *Gorkhapatra*, has said.

Political analysts have asked how the granting of adult franchise could be successful if the partyless panchayat system was to be maintained. The Government has also been warned against sliding back to the back-to-the-village national campaign days of consensus. This has been occasioned by the uncontested election of the Chairman and the Vice-Chairman of the House and the Prime Minister. It is feared that if consensus is sought to be obtained in many matters, opposition may emerge from inside and this development may prove more dangerous than outside opposition.

According to Dr Dilli Raman Regmi, a former foreign minister, unopposed election "will only undermine democratic practice". He holds that the new Rashtriya Panchayat "will in no way be more enlightened than the old one".

But others differ from this view and regard unopposed election of the Prime Minister as a sign of wisdom, maturity and foresight on the part of member of the House. However, an elected member of the House, Dr P. C. Lohan, has said that the unopposed election "marks the beginning of a wrong political procedure".

Among the issues which the Government would be called upon to tackle immediately is the agitation by teachers which started in mid-April. Their demands include better service conditions Students too have not been pursuing their studies for more than a year.

Several analyses have been done of the elections to the Rashtriya Panchayat held on May 9. According to them, elections revealed lavish use of money and emergence of communalism, election o members on the basis of personal manifesto and that not many sought votes in the name of partyless panchayat system and that three groups of panches have emerged: official, non-official, and nominated panches.

Mr Rishikesh Shaha, a constitutional expert who has held various government posts and has represented Nepal at the United Nations, has said that in the course of his tour of the country he did not find the people enthusiastic or happy over the elections. “Communalism, regionalism and parochialism are coming to the fore because of the absence of organised public opinion, as well as a collective programme and initiative”.

He said in an interview with a weekly that he undertook a tour because, as a student of political science, he was eager to know the people's reaction to election. “It is no exaggeration to say that elections, which are organised in democratic countries as the means to enlighten the public about national issues, were held in our country just to enable individuals to complete in personal popularity for the sake of gaining position of authority”.

But whatever the views and analysis of political pundits, Mr Surya Bahadur Thapa has declared that the Government would concentrate on economic development through time-bound and other programmes.

Within days of the installation of the new government, a seminar on “current issues in Nepalese development” was organised.

However, the political issue which the adherents of the partyless panchayat system believe has been solved with the national referendum and the elections under the amended constitution to the Rashtriya Panchayat once for all, political analyst in Kathmandu feel remains wide open. Their reading of the situation is that the issue is likely to be debated with some intensity and taken to the people even in far corners of the Kingdom by the elements who do not favour partyless panchayat system and are not reconciled with the referendum result.

Some political leaders have said that the boycott call given at the time of the last general elections which brought Surya Bahadur Thapa back to power has achieved its obective. They see in the elections of unknown person to the House an open indication of people's dissatisfaction with the functioning of the partyless panchayat system.

In an interview to *Matribhumi,* a pro-Peking vernacular weekly, former Prime Minister and leader of the Nepali Congress, Mr B. P. Koirala, is reported to have said: “Our boycott has established us as alternative to the panchayat system. The general elections have seriously weakened the artificial unity of the panchayat system and opened the eyes of many honest supporters of the panchayat system. It has also exposed the powers behind individuals and groups giving out various slogans and wearing various masks”.

The weekly quoted Mr Koirala as saying “everyone must realise the deep significance of the positive role played by the boycott in the national poitics. The panchayat system is breathing its last at this moment. It will finally die through three internal contradictions:

The conflict arising within the new Rashtriya Panchayat is due to conflicts among individuals owing to absence of any party discipline, principle or central force, conflict between the palace and the Rashtriya Panchayat and the conflict continuing for the last 20 years between the losing followers of the panchayat system and the extra-panchayat democrats”.

Mr Koirala reportedly declared: “The democrats are soon going to have a major opportunity. It is, therefore, essential for us to set up an organisation to shoulder the responsibility that is coming upon us very soon.

He said: “I have urged my colleagues and supporters to work in close contact with the people and share their weal and woe. Our future programme has been formulated. We have now to carry out the role of an opposition as a responsible alternative by utilising whatever political right we enjoy at the moment”. However, the rebel Nepali Congress leader did not say what organisation he had in mind.

In a somewhat similar tone Siddhi Lal Singh, a leftist leader, is reported to have said that the success of the boycott underscored the people's resentment against the partyless panchayat system and heralded “the success of the forthcoming people's struggle”. A Sidharthnagar paper *Dainik Nirnaya,* reporting this statement, pointedly mentioned that Siddhilal did not elaborate on “the struggle”.

PAKISTAN
NEPAL
INDIA
BURMA
BANGLADESH
SRI LANKA
MALDIVE ISLANDS
SOUTH ASIA REVIEW

This is how the leaders who have decided to remain outside the National Panchayat see the situation.

Meanwhile, one of the elected members, Rupchand Bista, is reported to have said that adult franchise has played a major role in “nationalising politics” and “we believe in a system in which power is vested in the people and is used for the development of the society”. Siddhilal is not alone to think on these lines. Another elected member, Karna Prasad Heyju, has said that in the Rashtriya Panchayat he would fight for “full political rights” for the people. Mr Heyju represents Bhaktapur, a known citadel of pro-Chinese Communists.

Moi ends racial controversy

Concluded from page 154

matters which are the subject of a substantive motion and resolution in the House. A substantive matter is that which results in a definite resolution of decision of the House and does not preclude external comments on such non-substantive matters as questions and adjournment motions.

Talking on references to “paper citizens” and such other remarks which apparently refer to citizens of non-African origin, Mr Keino referred to a ruling on a similar matter made on July 11, 1967. He asked the members to look it up in the *Hansard* of that day because it was a lengthy one, but added that its conclusion was that Section 82 of the Kenya Constitution did not allow discrimination against citizens of Kenya merely because of their skins. “This ruling is still valid,” Mr Keino said, “Remember that we have all taken oath to defend the Constitution of the Republic.” He appealed for greater understanding co-operation and harmony between Parliament, the executive, the judiciary and the press.

Mr Keino gave his ruling by quoting a statement made by President Moi during the launching of the 1979-83 development plan. The President's statement outlined the major goals and aspirations set by the nation after the achievement of independence. The goals included national sovereignty, territorial integrity of the nation's political stability; national unity; civil liberty under the rule of law; and accelerated development for the benefit of all.

All this controversy raged in Parliament which has been in session since June 10. The 1981-82 budget has affected only smokers, alcoholics and motorists. Income tax will go up from next January.

Fast growing garment exports

By **ARVIND BHANDARI**

DATELINE NEW DELHI

EXPENSIVENESS of labour has induced the advanced industrialised countries to move towards areas of manufacture requiring high sophistication in technology and increasingly surrender labour-intensive industry to the developing countries. The labour-intensive garment industry has, therefore, emerged as a major line of manufacture in the Third World. For India, garments today constitute an important item of export.

The growth of India's garment exports has been phenomenal, at least in value terms. Indian garment exports increased from a paltry Rs 10 crores in 1970-71 to Rs 152 crores in 1975-76 to Rs 377 crores in 1979-80. According to the latest figures available, last year India's garment exports touched Rs 435 crores, exceeding by Rs 10 crores the target of Rs 425 crores. The target for the current year has been fixed at Rs 540 crores. Indications are that this may also be exceeded.

However, lest this should cause unwarranted self-congratulation, it is necessary to remember that the monetary improvement is not matched by increase in quantum and that the spectacular statistics are largely ascribable to rising unit value realisation following progressively higher floor prices fixed by the Ministry of Commerce. For example, shipments to quota countries in January 1981 recorded a rise of 20 per cent in value terms compared to January 1980, but the increase in quantum was only 5 per cent. Again, although garment exports to quota countries during January-May 1981 were worth Rs 211 crores as against Rs 183 crores in the corresponding period of the previous year,showing an increase of 15 per cent, there was actually a 2.7 per cent fall in the quantum of exports. The number of pieces of garment exported during the two periods fell from 6,35,13,000 to 6,22,67,000.

Conversations with various garment exporters show that, among other things, bungling, inefficiency, irregularities and a labyrinth of rules and regulations involving miles of red-tape collectively add up to a retarding factor. Instances are not uncommon of export consignments bearing specifications which are considerably different from the contents. Another emerging reason of course is the growing competition from China which is poised to make inroads into the American and EEC markets.

The performance of the garment industry in regard to fulfilment of quotas is also not uniform. There are no doubt items where the performance is more than 100 per cent. But there is a fair number of items where the quotas are not met. In 1979, for instance, the utilisation of quotas in respect of various items in different countries was as follows: United States—dresses 34%, West Germany—skirts 49%, France—ladies jackets 4%, Ireland—skirts 5%, Norway—slacks and trousers 9%. While over-utilisation of quotas in respect of various items no doubt compensates for the shortfall in respect of other items, the over-all performances in regard to quota utilisation cannot be said to buttress the Indian argument that the United States and the EEC countries should enhance quotas and lower non-tariff barriers.

The Government has revised penalty provisions for exporters who fail to utilise their quota for export of fabrics and made-ups within the stipulated period. A notification says that if the utilisation is less than 75 per cent of the total quota allotted, the exporter will be liable to forfeiture of his performance bond and earnest money deposit. This will be subject to conditions of *force majeure*, wherever they may arise.

According to Mrs Shiela Dikshit, secretary of the Garment Exports Association, difficulties in regard to quota utilisation mainly arise because of changes and fluctuations in western fashions. However, the garment export industry is, according to her, beginning to acquire greater flexibility so that it can adapt itself more satisfactorily to changing needs.

Nearly 90 per cent of the garment exported are made of cotton. For long time the main items of export wer cotton piecegoods. However, durin the late sixties and early seventies shift began towards vertical integration of the pattern of exports from finished fabrics and cloth to value added converted items, like made-up and readymade garments. The most popular Indian items in the internationa market have been dresses for ladie followed by skirts and blouses. Gent shirts have, however, suffered a decline but this has been more than made up by emergence of jackets as a major foreign exchange earner of the Indian garment industry.

Most of India's garment export have been to quota countries, which means countries that permit entry o garments on the basis of item-wise fixed quotas. Countries in this categor are the USA, EEC countries and th Nordic countries. The largest Indian garment exports are of course to th EEC. This can be seen from the direction-wise break-up of last year's exports which is as follows: EEC Rs 235 crores, USA Rs 97 crores, Nordic countries Rs 27 crores. Exports to non quota countries, prominent among which are Japan and Australia, were only Rs 75 crores.

The Indian garment industry is still way behind that of small countries like Hongkong, Taiwan and South Korea which have a long tradition in clothes manufacture. Efforts are now being made to achieve greater diversification in terms of direction of exports The Apparel Export Promotion Counci plans to send delegations to East European countries, Australia, New Zealand and the West Asian countries to intensify export promotion in those markets. Also helpful to garment exporters should be the recent government decision to extend the facilities hitherto enjoyed by units in free trade zones to all 100 per cent export-oriented units.

The Indian garment export drive would also receive fillip if fabrics of cotton and man-made fibre blends could be introduced as against almost

Continued on page 181

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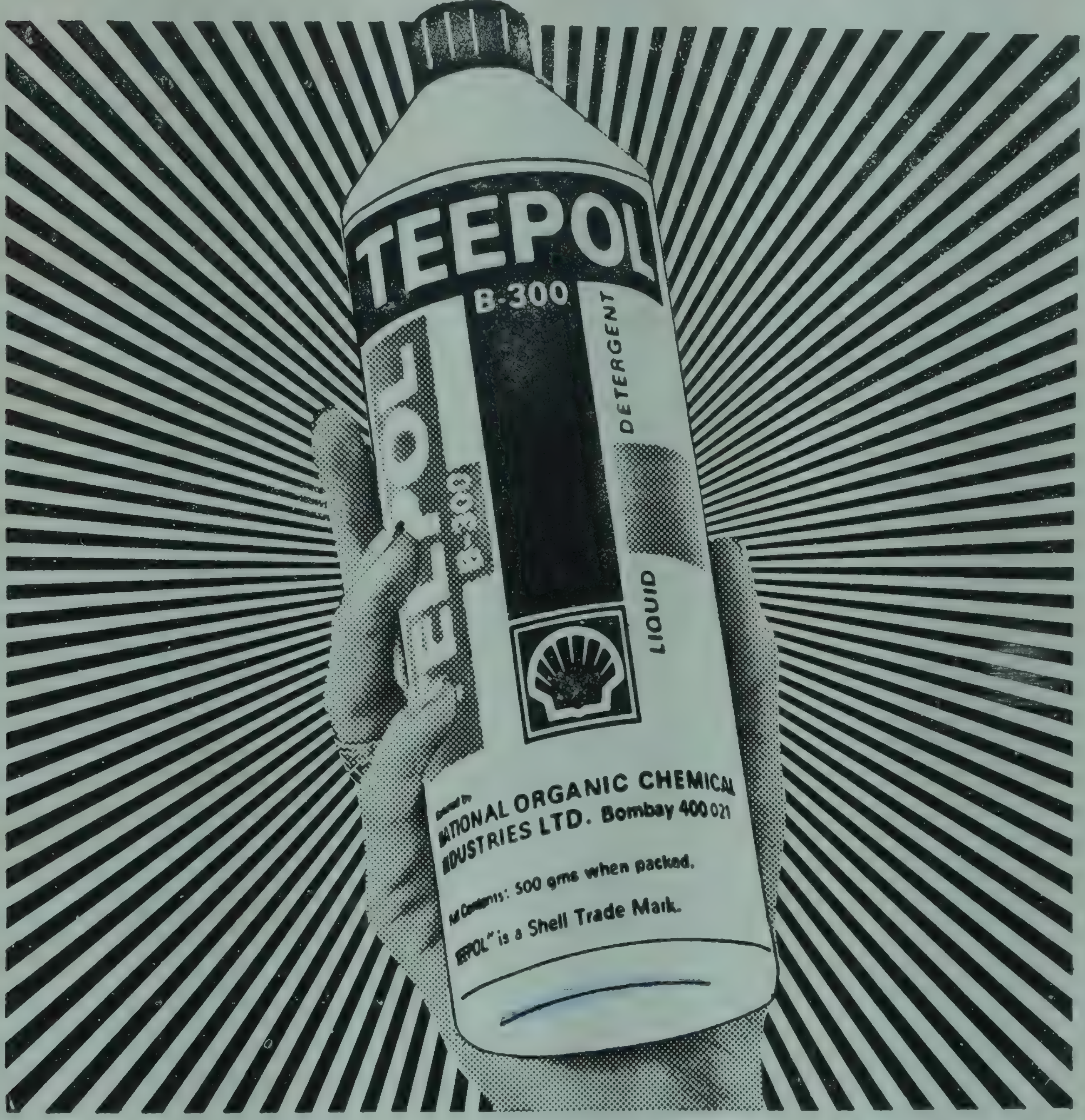
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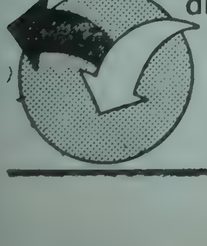

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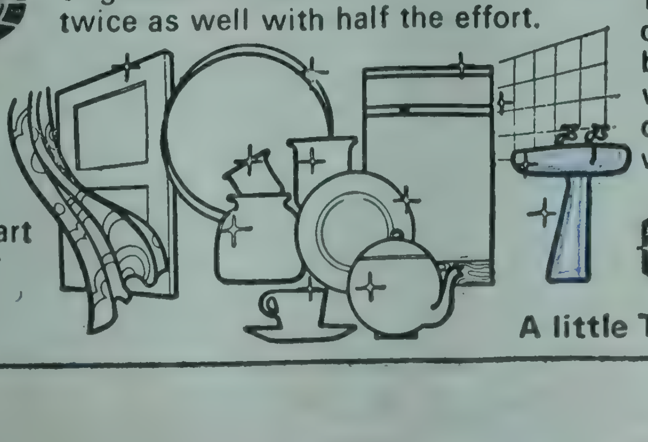

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from plague and pox.

I taught my child
the arts of Science.
But I have seen him
forsake my shores.

I befoul my cities
because I will not plan.
But I have looked up
and discovered Quasars.

I see food hoarded
while my poor go hungry.
But I have made the
green revolution happen.

I never taught my children
to read nor write nor count.
But I have fathered
Nobel laureates.

I see my brother outraged
by my prejudice
But I have elevated him
to the highest office.

I flee from the farms
to the despair of my cities.
But I have held to the hope
of a hundred million jobs.

I was born to subsist
on a half-Rupee daily.
But I have died so my ashes
can enrich my loved India.

I am sad.
But I am glad.
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EASTERN INDIA TODAY

Improvement in industrial relations

By P. C. MAHANTI

IN the Marxist-ruled West Bengal, one would have expected the militancy of labour to increase with time, but if "Labour in West Bengal", a State Government publication, is any guide, the situation is otherwise. In fact, during the year 1980 which this publication covers, there was a remarkable improvement in industrial relations "in all its aspects".

True that the number of disputes raised fell only marginally, but that would be no more significant an index of the labour situation than work-stoppages (due to strikes or lockouts), closures, layoffs and retrenchment all of which recorded sharp declines—so sharp in fact that the falls were the lowest for a decade or so. For example, work-stoppages (number of cases, number of men involved and mandays lost) were the lowest for at least seven years, and the figure for mandays lost came down to just around 6 million from 18.4 million during the previous year—a decline of two thirds. The figure for factory closures due to industrial action was the lowest for 11 years—the number of persons retrenched was the lowest for nine years and the number of the laid-off lowest for 11 years.

Coming to absolute figures (with the previous year's relevant figures in brackets), there were 213 cases of work stoppages including 51 brought forward from the previous year (290); 50 units closed affecting 3,392 men (5,423 men —83 units); of the 50 units eight reopened with 2,016 men finding back their jobs; layoff cases involved 14,848 workmen (199 cases—65,551 workmen); retrenchment affected 1,043 persons in 91 cases (1,120 persons in 78 cases).

An analysis of the closure figures for the past decade shows that 1970 was the worst year in West Bengal in this respect, when 260 factories closed involving 71,843 workmen; 1980 happens to be the year when closures were the fewest on record—just 50, of which eight subsequently reopened, and workmen numbering only a little over 2,000 were affected ultimately. National Iron and Steel Company was one of the eight undertakings that reopened after the closure. As to the causes of the closures, it seems economic grounds like financial stringency, lack of order and market depression and shortages of raw materials were the main reasons, together accounting for over 60 per cent of the cases, but indiscipline was the single largest cause of all, accounting for some 33.7 per cent of the cases.

Big investment in Orissa

Orissa's Chief Minister, Mr J. B. Patnaik, has given details of investments in industrial development that are going to take place over the Sixth Plan in his State. He adds it up to a total of Rs 4,800 crores—of which the Central share is Rs 3,300 crores. The Central investment will come in the form of an alumina/aluminium complex (already inaugurated), an integrated coast-based steel plant and a phosphatic fertiliser plant—these three involve the whole Central outlay of Rs 3,300 crores.

Mr Patnaik takes credit for his Government's new industrial policy which, he says, has already created a favourable industrial climate in the State. This is attracting investment from outside, and already 190 medium and large industrial projects with an investment of Rs 1,000 crores have been finalised. These include a polyester staple fibre unit (Rs 40 crores), two large paper mills (nearly Rs 100 crores), nine spinning mills (nearly Rs 70 crores) and two charge chrome plants (Rs 70 crores). Some 58 of these projects with the investment of Rs 150 crores are already under implementation. While the plans for industrial development are proceeding satisfactorily, the State's agricultural output this year is a record—at a little over 6 million tonnes.

Erratic DVC

The Damodar Valley Corporation is slipping again and power generation from this very important agency in the eastern region has of late become erratic. In fact, during June the output dropped to below 400 mw from this 1,115 mw power system and the management is probably looking for excuses (scapegoats) to explain things away. Apparently, and this is the point that several observers have made, the maintenance standards at the DVC are no better than what they are in the power plants run by the West Bengal State Electricity Board. During the months that the plants were flogged to yield high generation, it was nothing but cannibalisation of machinery. Mr P. C. Luther, the chairman, who brought about that magic transformation in the functioning of the DVC power system has yet to open his mouth as to what has gone wrong so suddenly. But if the charges made against the management by some people who are obviously connected with the power plants are correct, then Mr Luther has a lot to answer for.

The officers at some of the DVC plants, it is alleged, run the units in violation of statutory rules, not on their own, but at the behest of the authorities at Calcutta. During the period March-June last, there were a series of leakages in the boiler. At Chandrapura power station, for instance, tube leaks occurred every ten days in June, as much of the work to rectify the faults of the machines concerned were left unattended in the preceding months. Engineers are being asked to operate even those units which have already developed trouble. The plants, in effect, are being run until they break down.

Plants which have already worked continuously for over a year are not being shut down for overhaul. Safety of the plant is being neglected. These are but some of the allegations that are being made. Others equally serious cannot all be dealt with here, but the ones mentioned are serious enough. They would cause headaches sooner or later to any management that chooses to overlook them. Machines without proper maintenance can work only erratically.

If the Union Ministry of Energy has decided to set up in the near future 1,100 mw power station at Mejia in Bankura district, then West Bengal need not be facing the power famine that the State Government is visualising for the State by the end of this decade. Details as to who will execute the project—the West Bengal State Electricity Board or some Central agency—are not yet available, but the design, as reported in the press, will include three 200 mw units and one of 500 mw.

As the site for a superthermal power station, Mejia is close to a large coal deposit that can fully take care of the plant's needs for decades. However, an objection raised was that the coal deposit consisted of high grade coal that can be used metallurgically, and should not be wasted in power generation. That objection is not being heard any more.

SPECIAL ARTICLES

Solar pumps for irrigation

By A SPECIAL CORRESPONDENT

THE most promising and fast-moving solar technology today is that of solar cells: flat, circular, metallic, blue chips made of highly pure silicon, that can convert sunlight directly into electricity. If only the cost of these cells can be reduced to make the cost of the electricity generated by them competitive with conventional power stations, one can imagine every rooftop plastered blue with these little metallic chips. Each house could then generate all the electricity it needs and forget about the power cuts imposed by the electricity authorities so annoyingly often without any notice.

Silicon is available in abundance in every country of the world. But the process of refining the silicon available in nature to more than 99.9 per cent purity is extremely complex and its cost extremely high. This makes solar cells 10-15 times too expensive for using them widely. As a result considerable research is now being organised all over the world to reduce the cost of manufacturing solar cells.

Indian research on solar cells, which began in the mid-70s, is without any doubt the most advanced in the Third World today. The public-sector Central Electronics Ltd. (CEL) near New Delhi is the first full-fledged plant in the Third World to manufacture solar cells. The CEL plans to produce 40-50 kw of cells this year and by 1984-85, its proposed semi-commercial pilot plant should reach its full annual production capacity of 1 mw. During the Sixth Plan (1980-85), the government plants to spend some Rs 150 million on research and development of solar cells. A sum of Rs 100 million will be spent on the construction of the semi-commercial plant, and Rs 50 million will be spent on basic research. Some twenty Indian laboratories are presently carrying out research on this field.

There is considerable optimism amongst scientists all over the world that they will be able to bring down the costs of solar cells dramatically within the next 5-10 years. Manufacturing solar cells is quite similar to manufacturing transistors. During the 1960s, as the quantity of transistors manufactured rose, their costs fell precipitously. Uptil now the falling costs of solar cells have almost paralleled the earlier experience with the transistors. With every doubling in production, their cost has dropped by about 25 per cent.

If the CEL were to go in for commercial production of solar cells today, it could manufacture them at about Rs 120 per peak watt, says Dr U. Venkateswarlu, managing director of the company. By 1985, the company expects cell costs to come down to Rs 30 per peak watt.

However, to power variety of devices that are usually installed in remote locations, and for which other energy sources are extremely difficult to provide, solar cells are already becoming competitive despite their current high costs. For instance, the Oil and Natural Gas Commission is planning to use solar cells for powering various systems on offshore platforms and buoys for ship navigation. CEL cells are being used to power the lighthouse beacon at Dwarka port in Gujarat. After the Indian National Satellite is launched, the Indian Meteorological Department plans to establish one hundred solar powered weather stations in remote locations to collect data. Similarly, the Posts and Telegraphs Department is planning to operate microwave links with solar cells. Solar-powered watches and calculators are already being sold in the market for their sheer novelty.

The total quantity of solar cells needed for such applications is small but it is enough to provide CEL with the initial market it needs to build up its production facilities despite the current high costs of the cells. However, a massive market for solar cells should open when they become cheap enough to power irrigation pumps or to produce electricity on a small scale for villages. For these mass applications, the cost of solar cells must fall to at least Rs 10-15 per peak watt.

Irrigation pumps consume an enormous amount of energy in India. Some six million irrigation pumps are operating today, of which 3.5 million are electrical pumps and 2.5 million are diesel pumps. These electrical pumps consume about 10.5 billion units of electricity every year and the diesel pumps about two million tonnes of diesel.

Cheap solar pumps would be an ideal technology for irrigating small parcels of less than two hectares of land. Irrigating less than five hectares of land with diesel pumps becomes increasingly uneconomic as land acreage decreases. Small electric pumps can be used to irrigate small parcels of land but building distribution lines to every hectare of land is prohibitively expensive. However, cheap solar cells could be easily used to power small electric pumps. India has 70 million farmers, some 50 million of whom own less than two hectares of land each. Almost all the six million pumps operating at the moment are owned by the bigger farmers possessing more than five hectares of land.

The CEL believes that the price of solar cells can be decreased to Rs 30 per peak watt by simply increasing the volume of production. To achieve further reductions in cost, it is funding several research programmes whose aims are to (a) finding new ways to reduce the manufacturing cost of the cells; (b) develop local know-how for production of highly pure solar-grade silicon; and, (c) study materials other than silicon from which more efficient and cheaper solar cells could be manufactured in the future.

Solar cells are currently produced from ingots of single crystal silicon. The single crystal is grown from pure polycrystalline silicon. The Mettur Chemical and Industrial Corporation in Tamil Nadu has with the technical assistance of the Indian Institute of Science in Bangalore set up a small laboratory-scale plant to produce pure polycrystalline silicon. This technical feat is still far from meeting the country's needs but it is an important step forward in developing local know-how to produce solar-grade silicon. It is important to develop this know-how to manufacture the new raw materials needed to produce solar cells, it cannot use them in a big way. Manufacturing solar cells from imported silicon would be somewhat similar to running an atomic power station that is dependent on imported nuclear fuel.

Researchers at the Indian Institute of Technology, Kharagpur are meanwhile trying an interesting new approach for production of solar-grade polycrystalline silicon. They are using a widely available agricultural waste–rice husks –as their starting material. Nearly one-third of the weight of rice husks is made up of silicon.

Indian scientists are thus bravely trying to keep pace with worldwide technical developments in solar cells and can only be said to be few years behind USA or West Germany at the moment. But whether this will remain so even in the future is an open question. In 1979, the solar research and promotion budget of the US government was bigger than the entire R&D budget of India. The onus, therefore, lies on the Indian government to provide adequate support to the country's solar scientists, both morally and financially. According to projection made by Mr Maheshwar Dayal, senior adviser in the Department of Science and Technology, India can aim to power all its rural industry and irrigation pumps with solar cells by the year 2000. That would indeed be a major achievement. The energy demand from these two sectors should by then be equal to some 60-80 million tonnes of coal every year: more than half the total amount of coal consumed in India today.

Alarming growth in public debt

By SUBHASH J. RELE

THERE has been a lot of comment, favourable or otherwise, from industry and trade circles on various budget proposals particularly relating to reliefs in personal income and corporate taxation but nobody seems to raise even a whimper about the staggering level of public debt reached at the end of 1980-81. The tendency to under-play the damage the ever-growing public debt can do to the economy is widespread in our country. Our policy-makers never bothered to pay any heed to the warning given by world bodies on this score. The result is that the pace of increase in debt burden has grown in recent years. Some of the defenders of public debt assert that in terms of the GNP — public debt ratio, India's position is no worse than that of the developed nations of the world. They argue that the ratio of public debt to GNP for Canada was 60; for UK 97; for Australia 58; for USA 48 and for India it was 58.

The statistics of Indian debt sound alarming. The outstanding public debt of the Government of India as revealed in recent budget papers is expected to amount to Rs 40,324.84 crores at the end of 1980-81 and is estimated at Rs 46,776.48 crores at the end of 1981-82, comprising.

	As on 31st March 1981	As on 31st March 1982 (Rs. in crores)
Internal Debt	29008.49	34459.90
External Debt	11316.35	12316.58

Internal debt

Of the total public debt-internal and external, internal debt usually accounts for 65 per cent and the balance represents external debt. 'Internal debt' comprises loans raised in open market, compensation and other bonds, and 15-year annuity certificates. It also includes borrowings of a temporary nature, *viz* treasury bills issued to Reserve Bank, state governments, commercial banks and other parties, as well as non-negotiable, non-interest bearing securities issued by the international financial institutions like the International Monetary Fund, International Bank for Reconstruction and Development, International Development Association, International Fund for Agricultural Development and the Asian Development Bank. In addition, the Government is liable to repay the outstandings against the various small savings schemes, provident funds, deposits under the special deposit schemes and income tax annuity deposit schemes, depreciation and other interest bearing reserve funds of departments like Railways and Posts and Telegraphs and certain other deposits like deposits of income-tax, super-tax, etc deposits of local funds and civil deposits.

The public debt outstanding at the beginning of the first Five-Year Plan (1950-51) was of the order of Rs 2,565.40 crores. It was doubled in a decade's time and stood at Rs 6,244.24 crores at the close of 1960-61. After this the increase has been sharper and at the end of 1977-78, it touched a figure of Rs 40,900.36 crores. The debts of state governments to the Centre had increased more than hundred-fold in the last 25 years. At the end of 1947-48, they aggregated to Rs 62 crores. Loans to the states now account for more than half of the total outlay of the Central Government. The increase in the State Governments' debts was due to the large assistance provided by the Centre to them year after year for their development outlays, leading to the creation of capital assets and for meeting non-Plan needs. States find it easy and convenient to go in debts at the drop of a hat, by resorting to overdrafts. This must stop once and for all. The Centre and the state governments can ignore the danger signals at their own peril. All this is not an argument for defeatism but a plea that a difficult problem should be faced squarely so that credible remedies can be devised.

Foreign exchange reserves

Much noise was made in the past over the accumulated foreign exchange reserves in government kitty. It has been realised that the trumpet of achievement on this score was blown too loud and too long. This was unfortunate for it encouraged complacency when the need was to put accumulated reserves to productive use. In 1978-79, our foreign exchange reserves, excluding gold and SDRs rose by Rs 927 crores without taking into account the transactions with the International Monetary Fund. This growth represented a substantial slackening from the rate of growth in previous two years. In the year 1979-80, however, there was a decline of Rs 56 crores and the declining trend has continued in the current year. By May 30, 1980 foreign exchange reserves (excluding gold and SDRs) showed a decline of Rs 274 crores from the start of the year, as against a rise of Rs 282 crores in the corresponding period of 1979-80. The slow-down in reserve growth can be attributed to a levelling off in the rate of remittances by Indian expatriates, whose numbers abroad is now believe to be rising far less rapidly than in recent past. Some part of the decline can be traced to the fall in the rupee value of foreign exchange assets held in the form of US dollars.

External debt

Internal public debt is owed by the Government to its own citizens while the obligations of external debt is to other governments. The increase in external debt, which was just one per cent during the First Plan, rose to 28 per cent during the Second Plan and 66 per cent during the subsequent plans. According to one study, in two decades of planning from 1951-52 to 1970-71, external debt accounted for 55 per cent of the increase in government's indebtedness, both internal and external. Net external assistance received by India has been declining since 1976-77. From Rs 1,154 crores in 1975-76, it declined to Rs 844 crores in 1976-77, to Rs 469 crores in 1977-78, and further to Rs 384 crores in 1978-79. It picked up slightly to Rs 483 crores in 1979-

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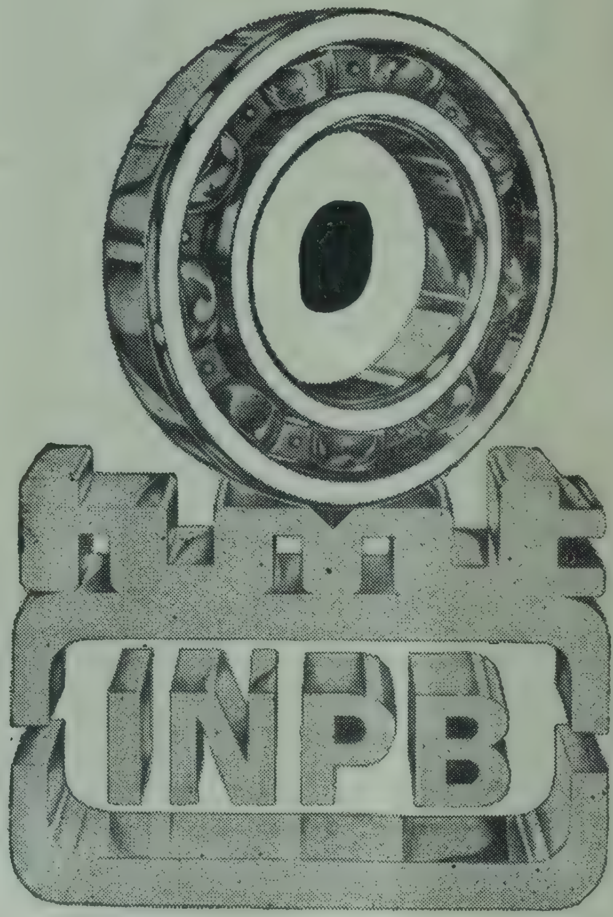
Mr Rele is editor of Industrial Times.

The plus that minuses all bearing problems.

HMT + INPB.
The sum total which has proved greater than the parts. The team-up which solved Bajaj Tempo's bearing problem when it exclusively developed and produced a special bearing which no other Indian bearing manufacturer could make and which Bajaj Tempo had to import.



The team-up which solved the army's bearing problem when it exclusively designed and developed a 120 mm. bearing for its 'Nissan' and 'Shaktiman' trucks and 'Jonga' jeeps. Bearings that were being imported till then.

This team-up between HMT and INPB has been one of the best things that has happened to the bearing industry in India. While INPB contributed its innovative capability and quality consciousness, HMT contributed its marketing, administrative and financial expertise alongwith its vast technological experience.

HMT and INPB offer not just answers to the most challenging problems in bearing design and development, but also satisfactory delivery schedules, distribution and service. Whether you need a special bearing or a regular bearing from our wide range of ball and roller bearings, HMT and INPB will solve all your bearing problems.

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Rediffusion/IN/1463 a

80. The share of imports, financed by net external assistance continued to decline from 22 per cent in 1975-76, to less than 8 per cent in 1977-78, and to less than 6 per cent in each of the years 1978-79 and 1979-80. The low percentage in 1978-79 and 1979-80 reflects the dominance of oil bill in the total imports.

In consonance with the rising pace of public debt, the service charges also increase. Debt service payments comprising amortisation and interest amounted to Rs 884 crores in 1979-80, which were marginally more than Rs 882 crores for 1978-79. At this level, debt service payments in 1979-80 siphoned off as much as 65 per cent of gross aid receipts. The *Economic Survey* 1980-81 has pointed out that "to retain a measure of flexibility, it is, important that the foreign exchange reserves are not allowed to go down substantially. This would imply an external financing strategy which ensures that essential imports needed by the economy, especially those for development, are not constrained, cost of borrowed funds from abroad is minimised and debt servicing obligations are kept within prudent limits".

The only silver lining is that of late, there has been a gradual softening of the terms of assistance offered by individual donor countries. The assistance from the UK, Sweden and EEC continues to be mainly in the form of grants. The balance of payments situation will remain under pressure in the coming years. It will be naive to expect any significant growth in the net surplus on invisibles in the coming years. The growth in foreign remittances had already levelled off in 1978-79 and in view of the considerable uncertainties regarding ability of the Gulf countries to absorb more labour, a continued growth under this head cannot be expected. Interest earnings from reserves will also decline in the future. These considerations point to continued difficulties on the external payment front for some years to come. The alarming increase in the public debt compounds the already complex problem.

A 100-fold inrease in government indebtedness is quite alarming, to say the least, even though it is conceded that the rise in prices during the plan period has considerably reduced the magnitude of the real interest burden on these debts. The only consolation, if it can be called so, is that the great bulk of our public debt is internally held. This implies that the debt does in no way alter the wealth of the nation. This, however, ignores the other very serious implications of higher and growing public debt on the future generations.

Public issue: Applicants' woes

SIR,—During the first fortnight of April 1981 a series of advertisements were inserted in the major newspapers by the management of Vam Organic Chemicals Ltd. These advertisements proclaimed that the company has secured technical collaboration with the internationally famous Swedish firm of Bofors and assured that the public that an investment in their shares would be worthwhile. On April 10, 1981, the *Times of India* carried a full page advertisement which extolled the benefits that a would-be shareholder would derive by subscribing to its equity shares.

The public subscription for the equity shares opened on April 13, 1981 with so much of fanfare. Later, a small news item appeared stating that the shares were oversubscribed by 3-4 times. I happened to be one of the victims, having been hooked by the tall talk of a Swedish collaboration. I had applied for 1,500 equity shares, drawing a cheque for Rs 3,750 so as to be quite certain of at least securing a few shares in the company.

For nearly 100 days the applicants were completely in the dark in regard to the basis of allotment. Later on news reached stating that all the applicants are being allotted on a pro-rata basis. The issue of shares was being managed by A. F. Ferguson Associates, New Delhi, who had convincingly demonstrated their ineptitude by bungling in this case. I was allotted 300 equity shares but no refund has been made for the excess amount in spite of repeated reminders. After what seemed to be ages a cyclostyled letters has been received from A. F. Ferguson Associates stating that the refund order has been mailed, and at the same time regretting the inconvenience caused to the applicants! It is quite surprising that a firm like A. F. Ferguson Associates should have placed their wrong foot first in regard to a Rs 2-crore issue. The ultimate sufferers are, of course, the subscribers to the issue.

A. Venkatachari

BOMBAY

Confirmed booking by Indian Airlines

SIR,—In spite of having confirmed (OK) tickets, sometimes IAC passengers are denied a seat. They are not helpless.

First, if they get tickets through IAC central booking, they should write to all stations *en route* of the number and confirmed status of the ticket, and local address. Since an outdated model of computer is used for central reservation, there is considerable confusion in charts sent to various IAC stations. Hence, such a letter is helpful to safeguard the passenger's position.

Second, if in spite of reporting on time, a confirmed ticket is not honoured, the passenger should ask for the refusal in writing. According to a legal expert, unless there is a situation beyond control of the IAC, refusal to honour a confirmed ticket in some situations attracts provision of the Indian Penal Code against the person who has issued the ticket. If the IAC has issued the ticket, the person who has accepted payment for the ticket can be charged with cheating. A civil suit can also be filed against IAC for losses incurred as a result of missing the flight.

Third, a complaint can be made to IATA, reciting all facts. Airlines are afraid of IATA because if the carrier is at fault, it will be fined heavily. The address is: International Air Transport Association, 2,000 Peel St West, Montreal P.Q., Canada.

Generally it is not necessary to file a complaint. The very mention of IATA brings IAC to its knees.

The public should co-operate with IAC authorities where such co-operation is due, but not allow transgression of its own rights as consumers.

M. R. Pai

BOMBAY

To The Editor

LETTERS

COMMERCE WEEKLY
Manek Mahal, 90 Veer
Nariman Road, Bombay-400 020.

BOOKS & IDEAS

Assessing rural development schemes

Evaluation Studies—Bank of Baroda

Conducted by Project Monitoring and Evaluation Cell, Priority Sectors Department; Published by the Central Office of the Bank, Ballard Pier, Bombay 400 038.

The Bank of Baroda has brought out reports of evaluation studies undertaken in the areas where the rural development programmes were financed by the bank. A set of four such reports of which three are printed while the last one is mimeographed is reviewed here. The names of the reports are :

1. Minor Irrigation Schemes, Masuda, Dist Ajmer, Rajasthan.
2. Comprehensive Tribal Farm Development Scheme, Bansda, Dist Valsad, Gujarat.
3. Integrated Dairy Development Programme, Padra, Dist Baroda, Gujarat.
4. Composite Minor Irrigation Scheme, Mysore, Dist Mysore, Karnataka.

The first report (Publication No 96) about the minor irrigation scheme in Masuda analyses the impact of the scheme of wells (new as well as deepening of old wells) and pumpsets on small farmers (those covered under the subsidy programme and non-subsidy), medium and large farmers. The sample selected for the survey was 128 beneficiaries spread over 34 villages. The productivity of different types of farmers in the pre-investment and post-investment period was studied. As regards the small farmers covered under subsidy for new wells, the report observes cotton and gram registered a spectacular rise in productivity, but that the rise was not commensurate with the targets. As regards the non-subsidy small farmers, the report observes that more area has been brought under cotton, wheat, barley and other rabi crops; however, the yield levels of the rabi crops had not reached the levels expected. As regards the medium farmers it is noted that the net incremental income had gone up. In the case of the large farmers it was observed that there was improvement in cropping intensity etc, but not to the expected level.

Chapter VII gives a critical assessment of the scheme and discusses the economic effects of the programme on various types of farmers. An important suggestion made in the report was that the indigenous water lifting devices needed to be replaced. The summary at the end of the report gives the findings of the study in brief.

The second report (Publication No 98) about the comprehensive tribal farm development scheme in Bansda deals with the lift irrigation, tractor unit and godown schemes undertaken by the bank with the active support of the Sadguru Agricultural Service Society, Bansda, in three villages *viz*, Luz, Khadakiya and Lachhkadi where the population was entirely scheduled tribe. The lift irrigation scheme was meant to tap the waters of two tributaries of the Kaveri river flowing through the taluka, the tractor unit for services to beneficiaries for converting their lands into Kyari lands etc, while the godown was to be constructed at Bansda for storing 6,000 bags of agricultural produce. The Bank supplied crop loans to the beneficiaries of the lift irrigation scheme. A sample study of 27 farmers was carried out and it was observed that per hectare productivity had gone up in the post-investment period. Similarly, the small farmers had improved their capacity to create valuable assets such as house, livestock and farm implements. This was also true in case of other farmers. The study also found that bullock power was not utilised in full by the beneficiaries. It, therefore, observed that proper guidance was needed to be given to the small farmers in respect of "purchase and utilisation of bullocks for optimum number of hours to reduce the cost of maintenance and increase the rate of return". The tractor unit also needed to be expanded and converted into a full-fledged "Agro Servic Centre". The study recommended tha cost of cultivation of paddy per hectar needed to be worked out on a mor scientific basis. As regards godown a Bansda the study noted a rising trend in the volume of foodgrains handled from year to year.

The third report (Publication No 104) evaluates the integrated dairy development programme in 51 villages of Padra. The programme was undertaken by the bank under the Margina Farmers and Agricultural Labourer (MFAL) Programme in Baroda district in its capacity as lead bank. 122 beneficiaries in ten villages were selected for the study and position regarding repayment of loan was ascertained. It was found that 37 loanees had repaid the whole loan (within one and a half year as against three years) while 55 beneficiaries were regular in paying back the loan instalments. Thirty were found to be irregular in payments. The reasons for this situation were analysed during the course of the study. Tables 7 and 21 dealing with milk production efficiency and economics of milk production (buffalo *vs* cross-breed cows) are important.

The fourth report (series No. 3) deals with the composite minor irrigation scheme in Mysore. The bank provided finance of the order of Rs 3.95 lakhs to 145 farmers and landless labourers in 12 villages for various purposes. Detailed information regarding eight out of 14 farmers who were financed for creating irrigation facilities was collected during the course of the study. An important finding was that the farmers were not able to correctly tell the water level maintained in the wells during different periods and in view of the importance of the same, the suggestion is made to maintain record of water-level on a continuing basis. Table 15 gives the net income per hectare under different crops for small, medium and large farmers seperately. Table 17 presents interesting data about pre-investment and post-investment costs, income and profit per hectare and the net return per rupee of investment. In the summary (chapter 6), useful suggestions are made to improve the return on investment made by the farmers with the help of bank loan including one to seek the help of Ground

Vater Survey Department in cases vhere the water had not struck at all s also where water was inadequate, or possibility of deepening to get adequate water.

The Bank of Baroda by bringing out the reports has done a commendable job. While the first three reports are based on adequate sample and hence can be taken as applying to the total population (of beneficiaries), the same cannot be said of the last report where the sample is very small. It can at the most be treated as a case study.

D. R. Deoras

A handy guide to Sikkim

Splendour of Sikkim

By Homi J. H. Taleyarkhan

Government of India Press, Gangtok, Sikkim; 1981; *Pages* 52, *illustrated, Rs* 5.

Mr Homi J. H. Taleyarhkan, who is now Governor of Sikkim, has in this small booklet provided considerable useful information on the economy of Sikkim, where 86 per cent of the people live in rural areas. There is not one single square kilometre of flat land in Sikkim and not a quarter kilometre of straight road in the State. Because of the scarcity of flat land large industries have not come up in the State. However, there are several medium scale and small scale industrial units. Road transport is the only means of communication in the State which has no air or rail links. The problems attendant on construction of roads in Sikkim would be evident from the fact that 250 major and smaller bridges had to be constructed to build 1000 kilometres of road in Sikkim.

To promote the growth of industries the State Government has introduced various incentives: Subsidy on interest on loans taken by small and medium industries from financial institutions, subsidy to the extent of 50 per cent on actual charges for the use of power and concessions in sales-tax and subsidy of up to 50 per cent of actual expenses incurred on pre-operative processes like project report preparation, training and consultancy. There are other incentives also. The book is, however, marred by too many corrections that had to be carried out by hand. It is not explained why a book written by a Governor could not be produced in a better manner.

Village : Primary unit

AN article in *Janata* by Mr Siddharaj Dhadda discusses the problems of decentralisation of power and asks two related questions: "The first is what should be the polity, a village or a group of villages? The second question relates to the powers of the primary unit". Mr Dhadda says there now seems to be a broad agreement on the fact that political and economic power should be decentralised in order to enable the people to tackle the various problems confronting them. The present tendency of the Government to acquire more and more powers to meet the growing problems has to be reversed. Too much of centralisation of power retards or even distorts the development progress.

The article says: "Even as regards development, it is visualised at present that it will take place mainly through the administrative staff, and on the basis of plans formulated by a central authority rather than on the initiative and on the active participation of the people and on the basis of priorities determined by them as the most suitable for their needs. The outcome of centralised planning over the last thirty years is too obvious to need any comment or elaboration. If the problems of poverty, unemployment or disparities have to be tackled effectively, this cannot be done through bureaucratic developmental effort but only through the direct involvement of the people in the formulation and implementation of economic plans.

"Thus, both from the point of view of effective economic as well as political development, the primary unit has to be the village. However, a minimum requirement of population for the village can be stipulated. This minimum could be 50 families, but not more than 100 (about 250 to 500 population roughly), in order to ensure effective participation of the people. Large single villages of, say, 2,000 or more of population and the city wards could be subdivided into self-governing units for specific purposes and with specific powers.

"Coming to the question of the powers of the primary unit, here again there has to be a fundamental change in the prevalent attitude. It must be clearly understood that mere devolution of power is not decentralisation in its real and effective sense. Decentralisation means the transfer of both initiative and sanction. The paternal attitude towards decentralisation must be abandoned. People must be trusted with initiative and actual exercise of power."

BOOKS RECEIVED

Amrita Sher-Gil and Hungary by Gyula Wojtilla; 1st published 1981, published by Allied Publishers Private Ltd. 13/14, Asaf Ali Road, New Delhi 110 002; Pages 73, plus appendices III; Price not mentioned; copyright reserved by Hungarian Information and Cultural Centre, 1-A, Janpath, New Delhi 110 001.

OECD Economic Surveys Spain—May 1981 published by the Director of Information, OECD; 2 rue Andre-Pascal, 75775, Paris, CEDEX 16, France; Pages 59 plus Basic Statistics, International Comparisons; Subscription US $60.00, £26.60, F240.00.

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THE TATA ENGINEERING & LOCOMOTIVE COMPANY LIMITED

Statement of the Chairman, Mr. S. Moolgaokar, for the year 1980-81

1980 was not an easy year, and with it came more than the usual quota of business problems and frustrations. All the more credit is, therefore, due to our employees, at every level, for achieving the targets set for the year. We have now exceeded a turnover of Rs. 600 crores and have broken all previous records of vehicle, spare part, excavator and export sales.

During the first 8 months of the year, however, the power shortage at Jamshedpur was worse than ever before and vehicle output was abysmally low. At the same time, many of the 'energy-lean' processes I had mentioned last year started coming on line. Coupled with an improvement in the actual availability of power at Jamshedpur towards the end of the year, these energy conservation measures made the power shortage less acute. The resilience with which our operations sprang back to peak performance speaks of the spirit of the Telco team. This is the source of our pride and of our optimism for the future.

The performance of our Pune plant was also excellent. With a substantial increase in vehicle production, our Pune operations filled in the gap created by power shortage at Jamshedpur. The results of the last two years have demonstrated the strength your Company has gained by building two separate factories.

In keeping with its objectives of self-reliance and growth from within, our Company has increasingly ploughed back earnings to meet the capital needed for expansion and modernisation. We shall continue to do this in greater measure. Telco has also started converting the investments it has made in plant, technology and people into improved performance. The Company's Directors have, therefore, proposed a Bonus Share Issue in the ratio of two for every five shares. Our performance will improve further from the additional plant capacity being planned and installed as this becomes fully utilised.

PRODUCTION OF CAPITAL GOODS

In my Statement last year, I had stated that the contribution from the Machine Tool and Production Engineering Divisions would grow. This year we produced in-house capital goods worth as much as Rs. 25.6 crores. In-house manufacture of such sophisticated equipment works out to be significantly cheaper than the cost of importing it and helps us fight inflation by minimising our capital expenditure. What is more important, these divisions enable us to imbibe the high technology which is necessary for improving productivity and reducing costs. They are assets whose true value is not reflected merely in the Rupee equivalence which is given to their output

FOREIGN EXCHANGE EARNINGS

Our Engineering Research Centre and our divisions for manufacturing machine tools and all types of dies give us the capability of introducing new vehicles which can meet the varying needs of our customers. Starting from the concept and design of a vehicle to manufacturing and installing the machines for producing it, our reliance on imported designs, know-how, machines and components is minimal.

Reducing the need for scarce foreign exchange is only one side of the coin. On the other lies an aggressive drive to earn foreign exchange. Telco's exports crossed Rs. 50 crores, making us the largest engineering exporters in India in the year under review. You will be pleased to learn that some of the major orders we won last year were in the face of strong competition from some of the best-known names in the international commercial vehicle industry. Unfortunately, exports are getting to be increasingly difficult. In the first place, inflation is playing havoc with the competitiveness of the prices we can offer. While we produce in an environment where there is 15-20% inflation every year, we have to sell in competition with manufacturers from countries where inflation is controlled to around 6-8% annually. Second, and by no means less serious, are the shipping and port congestion problems which exporters face. The total uncertainty and horrendous delays, which our ports inflict on exporters, lead not only to financial loss but permanent loss of credibility with major customers. Paucity of shipping space and high freight rates cost us crores in foreign exchange by way of lost business. Unless the authorities concerned take prompt measures to solve these problems, we may not be able to sustain the momentum of our export drive.

VALUE TO CUSTOMERS

Introduction of new designs as well as product and process improvements ultimately result in better value for the customer's money. After years of Research & Development effort and extensive customer feed-back from the field, we have now brought out the 1312 model which will fulfil a long-standing need in our range of commercial vehicles. Built specifically for arduous operating conditions, the 1312 is the first of a new series of vehicles which will set the standards for fuel-efficiency and low life cycle costs in the eighties.

The customer, however, needs not only a better vehicle but also prompt after-sales service and adequate spares. While the service and spare parts availability for Tata vehicles is sufficient for today's needs, we are undertaking major efforts to ensure that future requirements are met adequately.

ROAD NETWORK

After-sales service obviously cannot compensate for the inadequacy of the roads in our country. I am afraid we may soon have to face the grim situation of a vast sub-continent which has choked its economic arteries. Stagnation in road building is not surprising, considering the meagre outlays that are being earmarked for it.

The Sixth Five-Year Plan (1980-85) provides only Rs. 660 crores for national highways--a mere 0.7% of the total Central and State outlay. Compared with 1.3% originally proposed in the Fifth Plan and a little over 2% in the Fourth Plan, the trend is obvious. What is worse, several projects from the previous plan periods have yet to be completed and 38% of the meagre Sixth Plan provision is earmarked for them.

Building a total road system for the country, with roads suitably designed and maintained for the traffic they have to bear, would lead to substantial savings in fuel consumption, quite apart from the employment which is bound to be generated.

International experts wonder at the persistence with which India disregards the worldwide trend towards upgrading highways to carry heavier (and hence more fuel-efficient) vehicles. The need for inland transport is increasing so fast that, however efficient the railways become, our country will face a shortage of transport capacity. Step-motherly treatment cannot curb the growth of road transport but it can have a major impact on its efficiency. Considering oil prices today, no country can say it is too poor to afford good roads. The vastness of India only makes the argument more telling in our context.

Having mentioned fuel savings, I must reiterate another issue which I have raised year after year as being a prime means of achieving this saving. I am referring, of course, to the abolition of octroi. After years of discussion, it has been recommended at the national level to abolish octroi but the recommendation has yet to be implemented in all the States. Every month by which we delay the implementation means crores of Rupees worth of diesel (mainly paid for in precious foreign exchange) being burnt up, while vehicles wait endlessly at the pernicious octroi posts which dot our country.

BUILDING A STRONG ANCILLARY BASE

Installing additional capacity, to meet the ever-increasing demand, must go hand-in-hand with improvements in the utilisation of existing capacity. In Telco we are aware that the fullest returns have yet to materialise from the investment we have made. We are committed to extracting them. We see shortages in the availability of materials and components as a major constraint to making full use of our capacity in the future. The automobile industry is the industry of many industries. Therefore, its performance cannot be better than that of its feeder-industries. Vagaries in the timeliness and quality of supplies are becoming more frequent and more serious as the volume of our operations increases. Our attention is, therefore, focused on building strong ancillaries which will match our growth.

We possess an in-house technical expertise which enables us to give fledgling suppliers very real assistance by imparting technical know-how in the form of designs, processes and quality assurance techniques. Where necessary, we also give suppliers special equipment, toolings and inspection hardware which are not readily available in the country

The Company, however, can neither force suppliers to make the investments necessary for them to expand and upgrade technology, nor can it protect suppliers from the vicissitudes of the national infrastructure, the disruptions caused by industrial unrest and the steep cost increases they are facing. These supervening factors make a mockery of our attempts to introduce sophisticated materials planning techniques. Each year, inflation and our need to guard against the shocks of supply failures increase the amount of working capital needed to finance operations. We continue to seek ways to constrain the growth of working capital. The new on-line computer systems we are acquiring for both our Works should go a long way in helping us to monitor inventories, streamline material procurement and schedule production —prime requisites for effective management of working capital.

STABLE MANAGEMENT PLATFORM

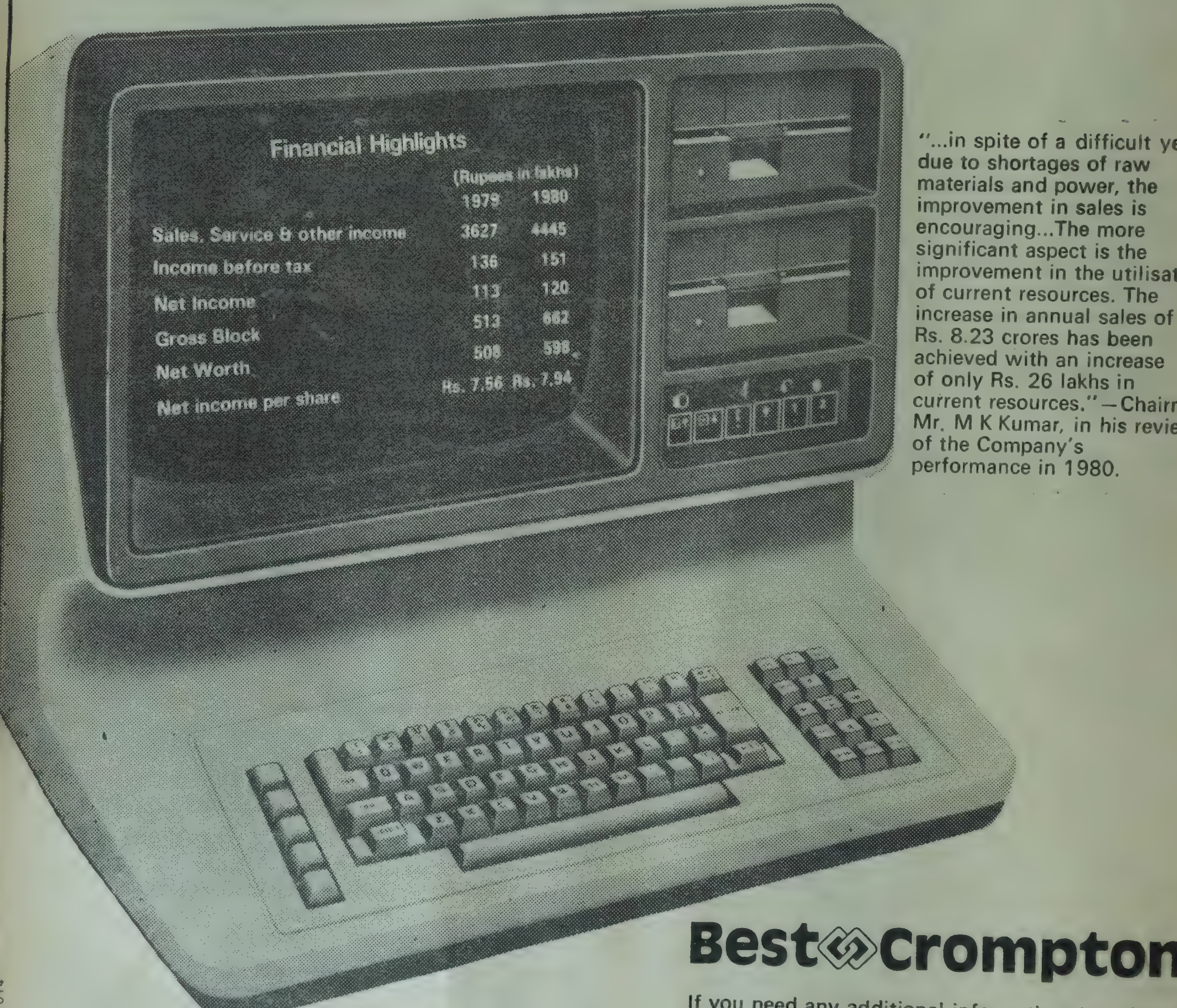
Telco now has a stable management platform which holds each of its strengths together, makes them perform in unison and provides continuity amid the changes that growth necessarily brings in its wake. Our Company has built a team which has the vision for creating the resources the organisation needs and the imagination for using these resources productively. The time and energy needed for building these resources, and indeed for building a stable management platform itself, cannot be substituted by foreign collaboration, recruitment of star performers or sudden and heavy doses of capital expenditure. Telco has spent, and is continuing to spend, time and energy on these essentials.

THANKS

The splendid response given by members of the Telco family to the call for stepping up production is apparent in the results the Company has achieved. On your behalf, I would like to thank each employee for his valuable contribution and thank the Unions for the constructive role played by them. Special mention must also be made of our suppliers who rose to the occasion and made prodigious efforts to meet our demands. To these and our other friends go our sincere thanks.

Note: This does not purport to be a record of the proceedings of the Annual General Meeting.

Best & Crompton: visible growth despite a year of shortages



Financial Highlights

	(Rupees in lakhs) 1979	1980
Sales, Service & other income	3627	4445
Income before tax	136	151
Net Income	113	120
Gross Block	513	662
Net Worth	508	598
Net income per share	Rs. 7.56	Rs. 7.94

"...in spite of a difficult year due to shortages of raw materials and power, the improvement in sales is encouraging...The more significant aspect is the improvement in the utilisation of current resources. The increase in annual sales of Rs. 8.23 crores has been achieved with an increase of only Rs. 26 lakhs in current resources."—Chairman Mr. M K Kumar, in his review of the Company's performance in 1980.

Best Crompton

If you need any additional information do write to:

Best & Crompton Engineering Ltd.
29, Rajaji Salai, Madras 600 001.

OBM 7014

COMMERCE

Vol. 143 No. 3658 Bombay, July 25, 1981

—A FEATURE

BANKING 1981

Changing scene : Indian banks in foreign markets and foreign banks in India

By P. C. D. NAMBIAR

THE dawn of the eighties has witnessed a sea change in the role of Indian banks in international banking. Their overseas operations, which were hitherto confined to providing remittance facilities to expatriate Indians abroad and financing India's foreign trade, have assumed a truly international character with the recent entry of some of the Indian banks into the international capital markets.

The few branches of Indian banks which were established abroad prior to India's independence in 1947 carried out the traditional functions of handling remittances of expatriates and routine foreign exchange transactions. The discernible change in the form and scope of their operations in the seventies was prompted, *inter alia*, by the following considerations :

a) To support India's multi-dimensional foreign trade;

b) assist Indian entrepreneurs who were venturing out in large numbers into foreign markets;

c) assume a developmental role by identifying untapped regions which offered a potential for the country's exports, particularly of non-traditional items;

d) serve the expatriate Indian community and induce the flow of their savings to India, for investment;

e) promote India's expertise in industrial, management and technological fields by providing financial and other assistance to Indian joint ventures securing high value construction contracts abroad and turnkey projects, through issue of bid bonds, performance guarantees, etc.

f) save foreign exchange for the country on exchange dealings by having direct access to all the important exchange markets of the world, through a branch network and getting the most competitive rates, and;

g) to earn profits, for which there is considerable scope in international operations. The keen competition among Indian banks to secure licences for opening branches abroad stems, to a large degree, from this fact.

Moving away from their traditional role averred to, their performance in recent years has amply demonstrated their international banking capabilities in mobilising resources for financing their ever expanding asset portfolios abroad as also the country's developmental projects.

Wide presence

Indian banks had, by the end of 1980, established their presence in almost all the important financial centres such as, London, Frankfurt, New York, Hongkong, Los Angeles, Tokyo, Chicago, Singapore, Bahrain, Paris and Panama. They also made an impressive entry into offshore markets in Singapore, Bahrain, Nassau, Cayman Islands, Colombo and Panama. It is creditable that most of the Indian banks have been able to operate satisfactorily despite the intense competition from multinational banks in many of these international markets. It will, of course, take quite some time for the Indian banks' share of the markets to be of some significance. A development worthy of mention in this context is the assumption of management, with or without equity participation, by Indian banks, of exchange companies and offshore banking units in the Gulf area, again testifying to the international banking capabilities and expertise acquired by them in the last few years. A few of these banks have also proved that they could make a successful entry into merchant banking activities abroad.

With a wide network of overseas offices spanning all time zones, Indian banks are now able to provide a full range of banking services. They also play an important role in raising foreign currency loans for Indian companies. Besides raising Euro-currency loans, the branches of Indian banks abroad are also active in extending loans to borrowers in third countries—at tim assuming the role of lead or co-le manager.

Being non-dollar based banks a the Indian rupee being non-convertib Indian banks have had to tap the Eur currency markets through issue Floating Rate Certificates of Depo and Floating Rate Notes, in order fund their increasing asset portfolio.

In recent times, India has resort to substantial Euro-currency borro ings, signalling a distinct shift in t country's policy in this regard. T comparatively low margins at whi the loans have been organised rais many an eyebrow, but it demonstrat without any doubt the excellent cre rating enjoyed by India in the inte national capital markets. Faced as w are with a reduced flow of internatio aid from world agencies and the wic ning gap of balance of payments de cit caused by oil price hikes, it wou become increasingly necessary to ra resources for many of the giant dev lopmental projects in this country organising syndicated loans in the for ign markets. Our total borrowings the international capital market bei negligible (about US $ 1 billion) a with an excellent track record of payments and continued political sta lity, India today commands a high c dit rating abroad and raising forei currency resources at competitive ra is not expected to create any ins mountable problems for some time come; Indian banks abroad would ha to assume greater responsibilities this area.

Untapped markets

Although the overseas expansion Indian banks has so far covered ma important international markets, th are markets with good potential Africa, South America and Austra which still remain unexploited. Giv an opportunity, Indian banks cou prove their mettle in these areas a

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Mr Nambiar is Chairman of State Bank of India.

it is, therefore, suggested that the Indian authorities adopt a liberal licensing policy. In a situation in which many of the foreign countries are shutting their doors to foreign banks, it would be necessary for the licensing authorities in India to deal with applications expeditiously and further time should not be lost in allowing Indian banks to enter the hitherto unexploited markets abroad.

At the end of June 1980, 11 Indian commercial banks had 130 branches (including two foreign currency banking units) functioning in 25 foreign countries. Besides, there was one subsidiary of a nationalised bank with three offices operating in a foreign country.

While Indian banks have enlarged their overseas network in the past decade, owing to the selective licensing policy followed by the Government of India, foreign banks have not been able to register any appreciable increase in the number of their offices in India, although many representative offices of foreign banks have been established here in the last few years. In recent months, the Government of India has issued a few licences to foreign banks to set up offices in India, presumably on the basis of reciprocity and a few foreign banks have accordingly established their presence in India or are in the process of doing so.

Important role

Foreign banks in India continue to play an important role in financing multinationals and large corporate clients in this country. While there are some restrictions on their activities, they are generally freed of any obligation in regard to priority sector lending, except for sharing the food procurement advances.

Foreign banks function mostly at metropolitan centres and an exclusive section of business clientele tend to bank with them. They are able to fall back on the substantial support facilities and sophistication that their home offices and overseas network provide. By and large, they engage in wholesale, low risk banking, largely on a 'no funding' basis and profitability of their operations is high, compared to the Indian banking sector. Their presence provides a healthy ground for competition, both in terms of ideas and services, particularly in the field of international banking. Further, with India entering the foreign markets for raising resources for its developmental projects, foreign banks established in India would be able to find wider areas for working in co-operation with the Indian banks in such tasks. The foreign banks could also act as catalysts for investment outlets in India for petrodollars, under the scheme recently announced by the Government of India for attracting portfolio investment in selected industries which require large capital outlays. Some of the foreign banks are also particularly aggressive in the field of merchant banking and with their rich experience in this line of activity, they have contributed significantly to the Indian capital market.

International financial centre

While the present role of foreign banks in India is limited, for various reasons, the scenario would undergo a radical transformation if the proposal to establish an international finance centre in India gathers momentum and the centre becomes a reality. Such a centre would create greater opportunities for the foreign banks to offer their expertise and experience in the sophisticated field of international banking and in promoting the economic development of the country. What is visualised is a financial centre that would :—

a) provide, on an offshore basis facilities for dealing in international money and exchange and financing of international trade; and

b) assume a significant role in the Euro-currency market and generate a capital market where money instruments including bills, acceptances, certificates of deposit, bonds etc would be promoted, issued, underwritten and traded internationally.

An international finance centre in India would have added significance in a situation where Indian corporations are being granted permission to seek overseas finance for their projects and India itself enters the Euro-currency market in a big way for balance of payments reasons. With appropriate tax concessions, exchange control relaxations and regulations and improvement in communications and other infrastructural facilities, it should be possible to develop an international finance centre in a city like Bombay which could play an important role in channelising the flow of capital into India on a stable basis.

The expansion in the network of Indian banks overseas and the foreign banks in India would be conducive to our achieving a greater degree of sophistication in international banking operations and in attracting capital investments for various projects in India, both in the private and public sector

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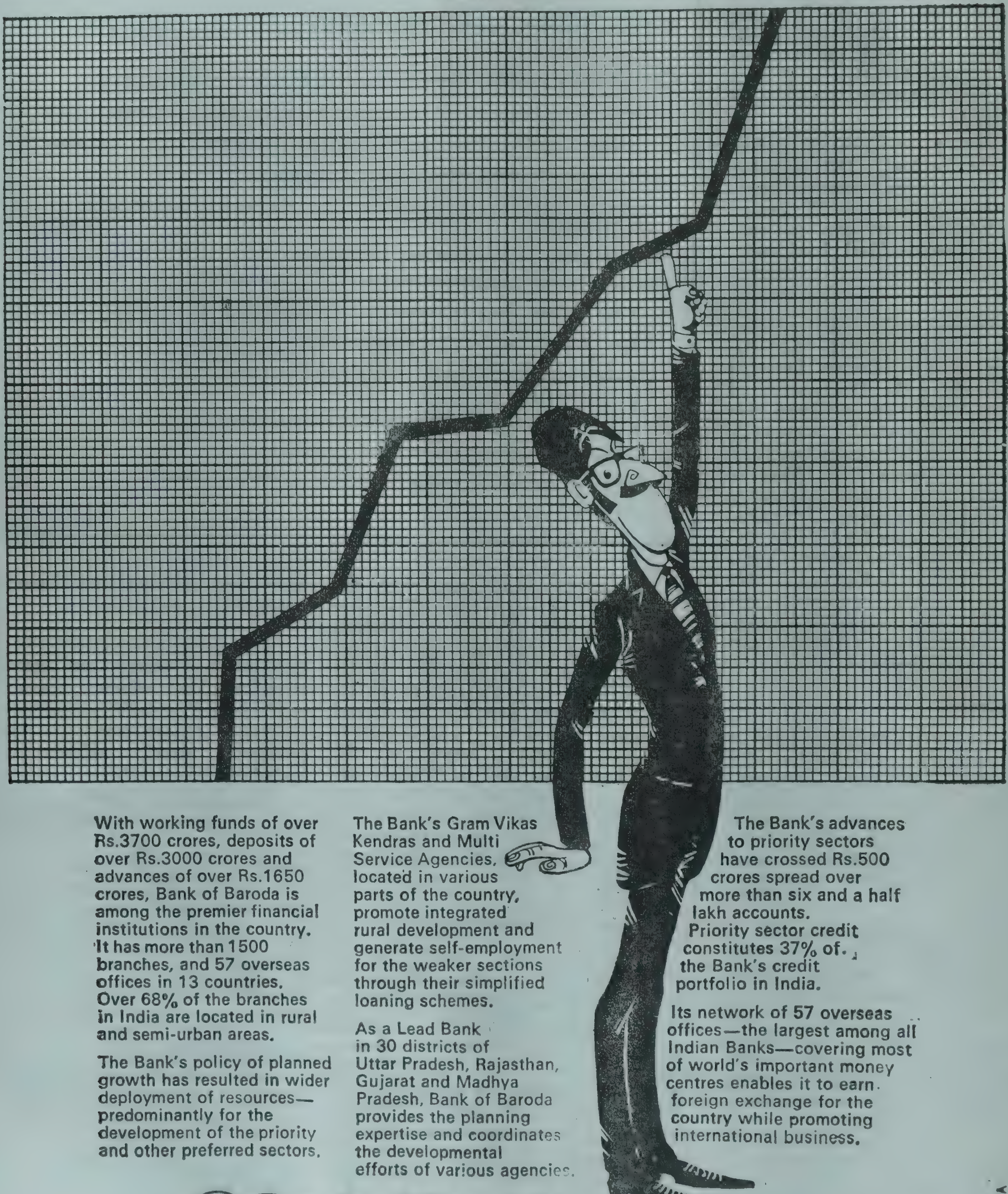
Bank of Baroda. How its growing resources help all sectors of the economy.



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Indian collaboration with finance and exchange companies abroad

By P. P. BHAT

IN the far eastern and middle eastern markets finance and exchange companies play a very dominant role in para-banking activities. That is how, at times, these companies are called merchant banks. Commercial banks in these markets are generally very big in size and hence—and even in respect of smaller commercial banks—they appear to be not interested in retail banking. The rates of exchange quoted by these companies as against commercial banks are competitive for remittances transactions, especially, for issuing demand drafts for family maintenance remittances of persons, Pakistani, Ceylonese, etc, origin settled in such markets. Another sphere in which these companies are very active is dealing in foreign currency notes, especially, US dollars, thanks to ever growing tourist traffic in these areas. Some of these companies are also equipped with well developed and sophisticated foreign exchange dealing rooms, including for gold, silver and securities dealt in international markets.

Wherever permitted by the licence issued by the monetary authority in the relative markets, these companies are also accepting deposits and lending money in deserving cases. The formalities involved for this purpose are, no doubt, more informal and rates are more competitive than the commercial banks.

Indian collaboration : In the field of setting up/managing of such financial and exchange companies, India has yet to make a headway. No doubt, laborious procedure involved in getting sanction from the authority for equity participation, is one of the hindrances, in this direction. However, when we consider that such companies are managed by western banks in places, like, Kuwait, Saudi Arabia, etc, where no fresh bank licences will be issued and such companies can be formed only with a local participation, we should be convinced that Indian financial institutions, particularly commercial banks, have not taken much interest in these matters. Let alone finance and exchange companies, several banks are managed by Pakistani personnel and the top management is drawn from Pakistani bankers who were working in Pakistan, before nationalisation of banks there. Some of these banks are quite aggressive even by western standards.

Management contracts : For the first time in the history of Indian banking, an Indian bank, entered into a collaborative agreement with a finance and exchange company in Kuwait for passing on technical know-how to that company. In other words, its dealing room would have been managed by the personnel expert dealers made available by the Indian bank. This would amount to export of expertise, which we are in a position to increase to any extent. In this venture, the bank in India, would not only not be called to subscribe to equity but also would not take losses, if any, even capital losses in initial stages. However, a fixed percentage of profits would be shared by the bank in India for rendering technical know-how. This is, no doubt, a departure from other financial and exchange companies established by some of the Indian banks, especially, State Bank of India, on equity participation basis. It appeared at one time, a good number of Indian banks were interested in such joint ventures, in the sphere of financial and exchange activities abroad, particularly, keeping in view, the stricter branch licensing policies for Indian banks abroad. However, not much headway has been made in this sphere due, perhaps, to the reported opposition of those Indian banks, who have established their own companies with local participation abroad with their own equity participation. Perhaps, these companies are not faring too well in those markets. Reasons are not far to seek. Some of the local finance and exchange companies are not only more aggressive in quoting competitive rates of exchange, etc, but also are in a position to render a quicker service to their clientele, considering that they consider finance and exchange activities to be business activities while the personnel drawn from public sector banks in India are not psychologically attuned to think of banking and financial activities as "profit making business" instead of their being merely "banking activities".

It would be a pity, if more and more banks are not encouraged to go out to render the services abroad on technical contracts. In no way these companies would take away the business from companies formed by other banks in India, since in any case business not transacted by such prospective companies will be taken away by companies managed by other nationals, especially, Pakistanis and nationals of western origin. If, more and more finance and exchange companies are allowed to function abroad, more and more inward remittances would be forthcoming through official channels only in the quickest possible time and at the most efficient rates of exchange. Even if it has to be reasoned out, there might not be substantial profits or even losses to these companies. These are borne by local parties, since we are discussing formation of such companies abroad without any equity participation.

Raising loans abroad: When the crying need of the hour is recycling of petro-dollars, especially in the field of export oriented projects and industries as well as free trade zones, Indian personnel stationed in such financial markets should be able to build up a better liaison with the intending investors abroad—Indian expatriates as well as foreigners. Most of these companies are owned by prosperous businessmen, who otherwise are carrying on with the trade and business activities all over the world as main line of their business. Such owners of these companies with their intimate knowledge of India derived out of their frequent visits to India as well as through Indian financial executives working for their own financial and exchange companies, would be in a position to bring a quite distinct dimension in increasing foreign investment in India.

Loans privately arranged : Loans for specific projects arranged by such exchange and finance companies through the good offices of local partners/owners should be still more competitive, especially smaller loans to the private sector in India, provided they fall within the exchange control regula-

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Mr Bhat is Chairman of Forex Club India.

tions and subject to permission of local exchange control authorities in India. No doubt, India has succeeded in getting Euro-dollar loans of bigger amounts at competitive rates, but, smaller loans on behalf of private sector parties based on spread over *LIBOR* rates might be too prohibitive to negotiate. When prime rates hover around 20 per cent per annum overseas, any loans based on, say, floating rate being fixed at half yearly intervals over and above *LIBOR* would be impossible to work on long term basis, especially, in these days of high interest regime. As against this, Arabs are prepared to invest in India on lower arbitrarily decided rates of interest on a reasonably repatriable yield pattern, due to political and historical reasons, as against western sector.

Recycling of petro-dollars: Should the authorities declare some selected industries as in the case of hotels and hospitals for Arab participation, but, with an obligation to export at a higher rate, it would go a long way in solving some of the major problems involved in choosing the right industries and the right parties abroad, if such finance and exchange companies managed by Indian personnel/banks, have to take initiative, knowing as they do both local and foreign markets very well.

Joint ventures abroad: It would facilitate establishment of joint ventures of Indian origin, should these finance and exchange or investment companies act as intermediaries, especially, to obtain market information, country and commodity profiles, etc.

Needs of non-residents: These companies would also be in a position to cater to the needs of non-residents of Indian origin settled in such markets using services of such companies for their remittances back home, in giving correct information to them, especially, with regard to rules and regulations prevalent in India in respect of facilities available to non-residents whether in respect of deposits and investments or manufacturing activities and especially tax matters. Many of these non-residents, most of whom are successful technocrats are not aware of the facilities available to them if they were to settle in India and hence good opportunities are lost to our country.

If industries manufacturing for export under excise bond or in a free trade zone, and with high value added concept, involving higher percentage of exports, are to be encouraged as a result of measures enumerated above, it should definitely help the country in getting much needed relief in the sphere of fuller employment, higher productivity, conserving of exchange due to import substitution and above all, a happier balance of payment position too—thanks to invisible earnings to India, out of share of profits of such companies and earnings of Indians serving in such companies.

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Euro-currency market: Opportunities for India

By SUSHEEL CHANDER

THE Euro-currency market constitutes a significant — and growing — segment of the international money and capital market. Though a relatively recent phenomenon—much of the growth of this market has taken place during the last 10 years — the Euro-currency market is today quite well spread and diversified and encompasses several markets separated by the type of transaction, geographical location, institutional arrangements and by the use of various instruments for financial dealings. Essentially, the term Euro-currency market refers to the supply, demand and availability of a particular currency at financial centres and money markets outside the 'home' country of that currency. To amplify, the Euro-dollar market refers to the market for US dollars in London, Singapore, Bahrain or any other financial centre outside the US. Likewise, the Euro-sterling market refers to the market for pound sterling outside the UK, the Euro-yen market, that for Japanese yen outside Japan and so on.

Of particular relevance and interest to us in the Indian context is that component of the Euro-currency market commonly referred to as the syndicated loan market. Within this specific market, the largest and perhaps most important element is the medium-term Euro-credit market. Conceived in the late sixties, this market developed rapidly in the seventies and is now a vital channel for the international flow of capital through the medium of term loans : typically, such loans could be for periods ranging from 5 to 8 years and 'syndicated' among banks active in international cross-border lending, the borrowers being governments, public sector agencies (parastatals) and private sector companies in both the industrialised world and in developing countries.

Roll-over credits

The size of each medium-term euro-loan varies with the nature and purpose of the borrowing. The median size could be reckoned at around $ 100 million though one does come across jumbo loans (in excess of $ 500 m) once in a while; the loan to National Aluminium Company (NALCO) for the Orissa aluminium project in the amount of $ 680 million syndicated late last year, is a case in point.

For the most part, syndicated medium-term Euro-loans are 'roll-over' credits, whose price to the borrower has three components : an interest rate fixed every 3, 6 or 12 months in line with ruling short term interest rates (usually the London inter-bank offered rate on deposits in the Euro-currency concerned, popularly referred to as *LIBOR*), a premium or spead, usually fixed for the life of the loan, though a marginal change in spread after the loan has run for some period is not uncommon; and thirdly, various fees, mostly recovered up-front. *LIBOR* represents cost of funds lent and is currently around 18 per cent per annum for 3 months deposits, 17¾ per cent per annum for 6 months deposits and 16¾ per cent per annum for 12 month deposits. The spread on loans to borrowers considered 'prime' risks is currently 3/8 per cent to ½ per cent per annum while front-end fees usually add up to around 1 per cent flat for most borrowers.

Syndicate Euro-credits are usually put together by a single bank referred to as the lead manager; for large loans a small group of two or three banks could function as the lead management group. To be appointed lead manager, the bank concerned has to win a mandate from the borrower on the basis of competitive bids. Thereafter, the lead manager or the lead management group gets to work preparing a detailed information memorandum on the borrower and on the loan in question and sends out offers, usually by telex, to international banks active in the market, inviting participations, followed up by a copy of the information memorandum to each potential participant. Based on the response to these offers (in terms of size of the participation), 'managers' and 'co-managers' are appointed by the lead manager : 'managers' and 'co-managers' are required to underwrite a prescribed minimum amount under the loan for which they are not only given a special status in the syndication but are also entitled to a larger share of the front-end fees than the other participants. Once the management group and list of participating banks are finalised, other formalities like loan documentation, drawdown and loan servicing mechanics, etc are attended to by the lead manager(s) with due expedition

Advantages

The advantages of a syndicated Euro-loan to a borrower are several:

i) *Speed*: The communication links and response systems are so geared in the market that the entire process from awarding the mandate to the drawdown of funds is completed in a matter of a few weeks. The borrower negotiates and deals only with the lead manager who, in turn, takes care of sourcing, structuring, syndicating and selling the loan to the other banks involved. The market is not closed at any time; and there are no 'listing' or registration formalities or other regulatory requirements to be met.

ii) An additional — and flexible — source of finance particularly for borrowers from developing countries, most of whom cannot tap the bond markets where listing and rating requirements can be quite exacting.

iii) Wide publicity in the international financial press through news items as well as 'tombstones' — the unfortunately sepulchral name given to advertisements that regularly appear in papers like the *Financial Times* of London, the *Wall Street Journal* etc furnishing salient details of the loans syndicated.

iv) Forging new banking relationships which could turn out to be in the borrower's long-term business interests. Trans-national companies and even sovereign states have multi-banking relationships throughout the world. A large euro-loan syndication could help strengthen existing connections and develop new relationships as well.

v) Facilitating access to other sectors of the international capital market such as the Euro-bond market where long term loans at *fixed* (and relatively low) interest rates could be raised by borrowers enjoying good ratings.

For these reasons, syndicated Euro-credits have proved to be quite popular with borrowers in the developed world as well as those in the lesser developed countries. Thus, during 1979 alone, syndicated credits totalling some $ 72 billion were arranged (publicised figure). In 1980 this figure is expected to have been close to $ 80 billion with outstanding publicised syndicated loans as of year-end 1980 amounting to around $ 250 billion Syndicated medium term Euro-currency lending has come to form a significant part of the balance sheets of international banks — a part that has been growing

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rapidly in the last few years. Developing countries like Brazil, South Korea, Phillipines and even oil-exporting countries like Mexico, Venezuela and Nigeria are large and regular borrowers in this market.

Yet another segment of the Euro-currency market that many developing countries tap is the short term market comprising acceptance credits (against specific international trade transactions) and outright loans for 6 to 12 month periods for financing lags in balance of trade and other deficits on current account. Here again, lending syndicates are formed, banks generally being quite eager to join as participants or managers considering that they are not exposed to the risks of maturity transformation for the most part.

Big gap

India has traditionally met most of its requirements for external funds through aid channels, government-to-government assistance, World Bank loans (including quasi-commercial loans from the IFC and soft loans through the IDA), drawings from the IMF, etc. With the deepening recession in the industrialised world, the increasing constraints and pressures on the resources of the World Bank and its affiliated institutions, particularly in the wake of the recent emergence of China as an important claimant for soft-term credit, India would have to turn increasingly to commercial sources for meeting its foreign currency requirements. These factors apart, even financial institutions in India like the IDBI, IFCI and ICICI seem to be running short of rupee resources: large business houses are in fact being exhorted to turn to commercial sources abroad for a portion of their requirements of project finance. Among these commercial sources the two most important are :

a) subsidised export credit schemes available in the UK and many European countries against shipments of capital goods; and

b) syndicated Euro-currency loans.

Again, the country's Sixth Five-Year Plan envisages gross external resource requirements (gross capital inflows as the Plan document puts it) of Rs 10,976 crores against which net foreign aid to the tune of Rs 5,889 crores has been taken into account. The resultant gap of Rs 5,087 crores has obviously to be bridged by drawing down foreign exchange reserves and through other borrowings. However, though India's exchange reserves, excluding gold and SDRs, are estimated to be around Rs 4,400 crores, the scope for drawing on these reserves is limited. The country would have to maintain reserves to cover at least 2½ months' imports which, on the basis of current trends, would work out to around Rs 2,500 crores. Thus, less than 50 per cent of the gap of Rs 5,087 crores can be met through a drawdown on reserves. But even this seems doubtful since the situation on the balance of trade front is none too comforting: the final trade figures for 1980-81, recently released, show that the balance of trade deficit would be close to Rs 5,500 crores (as against Rs 4,200 crores estimated earlier); assuming a net surplus on invisible account of Rs 2,500 crores, the deficit in the current account would be around Rs 3,000 crores which, again, would have to be met through the reserves 'cushion' of Rs 1,900 crores supported hopefully by external assistance and borrowings from the IMF beyond the conventional tranches—recent press reports indicate that a loan of US dollars 4 billion (Rs 3,200 crores) may be thus sought.

With the import bill rising rapidly year by year, exports lagging behind and the net surplus from invisible earnings more or less static, the balance of payments position is likely to come under increasing pressure over the next few years at least. Clearly, if India is to maintain the pace and tempo of economic growth and development outlines in the Sixth Plan document during the remaining three (full) years of this Plan, there seems to be no option but to go in for commercial borrowings on a larger scale than hitherto, particularly when the climate for increased assistance through official aid and through the IMF/World Bank does not seem very encouraging. And this means increasing recourse to the syndicated medium-term Euro-credit market.

Congenial climate

Notwithstanding the rather disconcerting balance of payments position just outlined, the climate for borrowings in the Euro-currency markets by the Government of India as well as companies operating in India is still quite congenial. As is well known, India entered the syndicated Euro-currency loan market in a big way last year with total borrowings close to $ 1 billion. The 'spreads' that NALCO secured on their $ 680 million, 10-year loan and ONGC on their $ 200 million, 7-year loan were comparable to what the best-rated risks could command in this market which, as is well known, is dominated by hard-nosed bankers from the world over. Indeed, the overall terms that both NALCO and ONGC secured were the envy of many countries in the developed world. Such fine terms may not be available for future borrowings in the Euro-currency market—the spread on the ONGC loan was fixed at 3/8 per cent for the first three years, thus breaking the mythical ½ per cent barrier. Even so, the country's risk rating in the market is still good, thanks to the Government's largely prudent economic policies, the encouragement given to the private sector in the accelerated programme of industrial development, self-sufficiency in food, continued political stability and, not least, the comfortable level of foreign exchange reserves and the low level of external commercial borrowings. Consequently, it has been estimated that, during the next few years, borrowings to the tune of $ 3-4 billion from the Euro-currency markets should be possible on terms favourable to us.

The need for increasing imports of capital goods and technology into India —at least on the scale envisaged in the Sixth Plan document—has never been more pressing. Although among the top ten countries in the world in terms of GNP and with the third largest pool of scientific and technical manpower, India today finds itself lagging behind newly industrialised developing countries (NIDCs) like Hongkong, Singapore, South Korea and Taiwan when it comes to a question of exports of engineering goods and electronic hardware. With a staggering balance of trade deficit of nearly Rs 5,500 crores in 1980-81, which may well be even higher during the current year, there is a paramount need to step up exports. Traditional items of export are under severe pressure either due to protectionism, sagging prices or the recession in many industrialised countries, so that it is the engineering and electronics industries that would have to play an increasingly large role in the country's exports: engineering goods exports during the current year (1981-82) are slated to rise, according to the Engineering Export Promotion Council, to Rs 1,150 crores as against Rs 900.50 crores (actual) during 1980-81 while, in the years ahead, this figure (of Rs 1,150 crores) would have to be stepped up significantly. For this, imports of foreign technology as well as machinery and equipment are both essential and urgent.

Tapping Euro-currency markets

It is against this backdrop, that I see an excellent opportunity for Indian companies, both in the private and public sectors, to tap the Euro-currency markets in a big way in the years ahead. The speed and flexibility with which syndicated Euro-credits can be put together has been mentioned already. State Bank of India and some of the other public sector banks in India have built up the required expertise, contacts and experience to help Indian borrowers raise such loans on optimum terms. True, interest rates in this market are currently at high levels, but then an all-in rate of around 18½ per cent per annum (on the basis of the prevalent 6-month *LIBOR* for dollars) cannot be deemed unduly high under today's double digit inflationary conditions in most countries of the world. After all, an 18½ per cent per annum interest cost works out, on an after-tax basis in the Indian context, to a net cost of just over 8 per cent per annum and any viable project worth the name should be able to support an outgo of this magnitude. Even domestic interest rates in India, averaged out, are not appreciably lower: the rate for medium term loans was recently stepped upto 15 per cent per annum.

It must also be noted that interest rates in the Euro-currency markets exhibit fairly wide fluctuations. Thus, in the Euro-dollar market, the peak has been around 20 per cent (just touched) and the trough around 5-6 per cent. For the last two years, however, interest rates have been ruling relatively high (above 10 per cent for the most part in the Euro-dollar market), but this would seem to be more of an aberration if one views the interest rate graph over a 10-year scenario. The point is that Euro-dollar and Euro-currency interest rates, in general, can well move down in the years ahead to levels below those ruling in India : this cannot be said of interest rates on commercial loans in the Indian scene — at least on the basis of the trends witnessed in the last 10-15 years.

Another possibility in the Euro-currency markets is the raising of medium-term loans in D-marks, Japanese Yen or Swiss Francs where interest rates are generally lower than those in the dollar segment, but then these other currencies are essentially strong and borrowers run the risk of exchange appreciation. A medium-term Euro-loan with a multi-currency option to borrowers to switch from one currency to another every six months or so is yet another sophisticated borrowing vehicle available to Indian companies. It would, however, be desirable to seek expert advice and counsel on these alternatives.

All considered, the time seems quite propitious for India to tap the Euro-currency market for loans — the syndicated medium term market for project loans and the short-term market for acceptance financing to shore up pipeline funds. Of course, the Department of Economic Affairs in the Finance Ministry would have to take a policy decision to go in for such borrowings after giving due consideration to the various factors involved; the need for an element of selectivity and prudence cannot certainly be gainsaid. It is the earnest hope of the growing community of international bankers in India that the country would cash in on the opportunities available to it right now in the Euro-currency markets on terms befitting its growing stature and credit-worthiness and that this would, in turn, act as a further spur to its industrial and economic growth in the years ahead.

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Expanding the international business of Indian banks

By N. K. THINGALAYA

IN the present context of international banking, the Indian banks have an increasingly larger role to play in India's international trade. For quite some time now, the Indian banks have been operating, and a few of them very successfully, in different parts of the world. United Kingdom has been the base for international banking for most of the Indian banks till recently. With the amendment in the banking regulations in United Kingdom, it has become relatively easier for the Indian banks to operate in the sterling market as fulfledged banks. A few of the banks, in the recent years, have been instrumental in arranging Euro-dollar loans for some of the industrial projects undertaken in this country. In the recent budget, it has been categorically mentioned that steps have to be taken to increase our foreign exchange reserves largely through expanding our international trade. It is, therefore, essential to explore the possibilities of improving the Indian bank's functioning abroad in order to play a more effective role in international banking. One of the constraints noted in this case is the low capital base of the Indian banks. The capital base in the case of Indian banks is hardly one per cent, much lower than the capital base of the foreign banks.

There is, therefore, a case for raising the capital base of the Indian banks which have foreign branches. The capital base can be raised through the budgetary provisions by the Government of India, the owner of the public sector banks, by raising the total paid up capital of the banks. It is reported that in Italy in the case of public sector banks, the capital base was raised by nearly 50 per cent through the expansion of capital by the government. This is perhaps one way of improving the financial image of the banks which have to compete with other foreign banks abroad. The second method of raising the capital would be through the transfer of a part of the profits earned by each of the banks and capitalising the same. This has been done by a few of the banks in the recent past. There is, however, a limitation here as the volume of profit generated may not be that large to enable the banks to raise the capital substantially out of these resources. In all probability, such a procedure of capitalisation may result in only a marginal increase in the capital base of the banks.

A third method of improving the capital base would be to raise the authorised capital of each of the public sector banks and to allow the banks to subscribe to the capital of each one of the other public sector banks. In this case also perhaps the impact that can be made on the capital base of these banks would be very much limited.

It would be perhaps more expedient to think in terms of an initiative on the part of the Government of India to raise the capital base of the public sector banks. Since the nationalisation of fourteen banks, by way of transferring a part of the profit to the Government of India, the public sector banks have transferred a sizeable amount of money. This is in the neighbourhood of Rs 43 crores. The Government of India, therefore, can consider the feasibility of subscribing to the capital of the public sector banks out of these funds.

Yet another method of improving the image of the Indian banks abroad would be to enable them to share the international business which is largely handled by the State Bank of India at present. The State Bank of India because of its size and the volume of business handled has come to be treated as one of the big banks in the international banking sphere. When India imports a large quantity of oil, the import business amounts to a sizeable volume and this is largely handled by the State Bank of India. If by an arrangement this import business is shared between a few public sector banks, that would result in improving the foreign business of other Indian banks as well.

It may also be noted here that the international business is more profitable compared to the retail banking business which the Indian banks undertake at home. The PEP Committee has revealed that the foreign business is a more profitable venture compared to domestic banking business. By increasing the international banking business of the Indian banks, it is possible to subsidise a large part of their domestic business. From this point of view, it is advisable to permit the Indian banks to explore the possibilities of opening branches in some of the developed countries. Thus, with a view to expand the international banking business of the Indian banks, there is a need for raising their capital base in the first instance. Secondly, there is also a need for liberalising the licensing policy with regard to the branch expansion abroad.

Dr Thingalaya, Head of the Economic Research and Planning Department of Syndicate Bank, is also the Editor of Pigmy Economic Review *published by the Bank, from which this is reproduced.*

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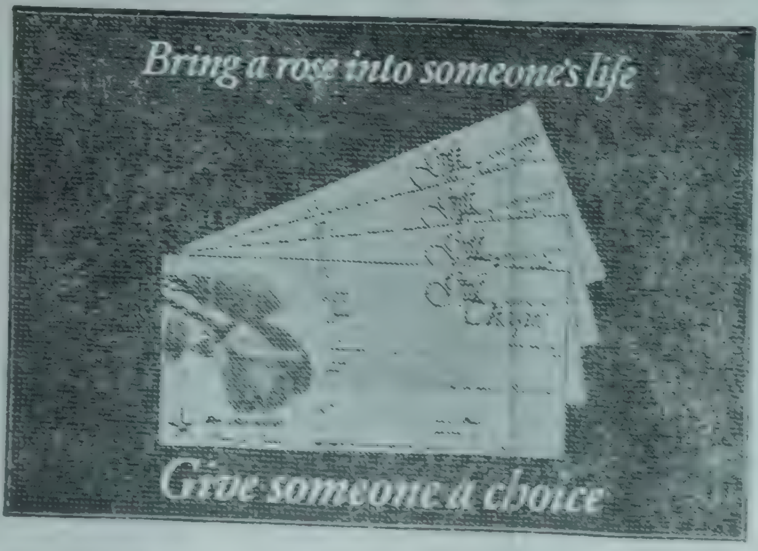

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Agricultural credit : Removing the crisis of credibility

By A. K. GANGULY

DESPITE the new wind of change sweeping over the banking industry, commercial banks are taking the battering of criticism due to poor customer service, accumulated agricultural overdues, diversion of priority sector advances from the poor to the affluent sections of society, all of which could have created a crisis of confidence for banks—mainly the nationalised ones. But in the euphoria of branch expansion and the phenomenal growth of deposits and advances, banks have not suffered overmuch except giving rise to a crisis of credibility or sometimes even a crisis of identity in recent years. Are the banks biting more than they can chew or have they been assigned a much bigger task than they can perform with a reasonable degree of efficiency? The substantial increase in priority sector advances from 33.3 per cent to 40 per cent by 1985, according to the Krishnaswamy Committee's recommendation, raising the agricultural loans to 16 per cent out of a bank's total advances, out of which 50 per cent should have to be set aside for poor and marginal farmers, 12.5 per cent for small industries, granting of 40 per cent of DRI advances to the scheduled castes and scheduled tribes, utilisation of 60 per cent of deposits mobilised in the rural and semi-urban areas in those areas themselves, all are ambitious tasks.

In the face of the steady erosion in the rate of growth of profits in banks, the RBI—as a godfather of commercial banks—should have extended some subsidy to enable them to discharge their obligations to the poor and neglected sections of society. The net profit of the Reserve Bank has averaged anything between Rs 250 crores and Rs 300 crores a year during the last five years. As banks are required now to put 35 per cent of their resources under the statutory liquidity ratio (SLR) and as the cash reserve ratio (CRR) is now being raised from 6 per cent to 7 per cent in two stages, their profit-earning lendable resources are being steadily eroded. Banks have to consider the present position as one when a thing which cannot be cured has to be endured. They know well enough that in fulfilling their obligations to the poor and neglected sections of society and in implementing the 20-point programme, they have not always covered themselves with glory.

Big profile

Nowhere is this more obvious than in agricultural lending where the average rate of recovery is no more than 51 per cent on an all-India basis and in some states—as in West Bangal—it is no more than 41 per cent. It is true that banks have projected a big profile in agricultural lending in the post-nationalisation period, with the result that the outstanding amount extended to the agricultural sector stood as high as Rs 2,870 crores through over 8.7 million accounts at the end of 1979. This has to be compared with a pitifully low profile of Rs 162 crores extended through only 160,000 accounts as at the end of June 1969 just before nationalisation. This undoubtedly is a big achievement in quantitative terms. And nowhere in the world have banks undertaken so big a task in improving the lot of the poor and neglected sections of the community. In view of the stress laid on commercial banks to implement as many as 13 provisions of the 20-point programme which are directly related to their field of activity and the need to achieve the Sixth Plan target of foodgrains production of 154 million tonnes, the big role of commercial banks in extending credit to agriculture inevitably remains undiminished.

But it is sad to see that much of agricultural lending, apart from not being recovered, has not actually gone to agriculture, which is still a gamble on the rains, but only to such profitable propositions as the financing of fisheries, horticulture, poultry farming and other such related activities. Money-lenders still rule the roost in the villages, providing 48 per cent of total credit in the countryside, although agriculture contributes 47 per cent of India's national income and 75 per cent of the people are still dependent on it.

Mounting overdues

The mounting overdues of agricultural loans have posed the biggest problem for the recycling of funds for agricultural development. The recent remission of co-operative credit by the state governments of Tamil Nadu, Maharashtra and West Bengal has raised a ripple of controversy about the necessity, or even the expediency, of the measure. The RBI Governor, Dr I. G. Patel, has rightly stated that a distinction should have been made between the wilful defaulters and those who defaulted due to their poor financial position. But it is a pity that there is no up-to-date survey on rural indebtedness, although the Government has decided to banish rural povery and to bring down the percentage of people living below the poverty line from 48 to 30 under the Sixth Plan. Although rural borrowings have swelled from Rs 750 crores in 1950-51 to Rs 6,000 crores in 1980, there is no dependable study of the extent and dimension of rural indebtedness in the country. In fact, the institutional structure of agricultural credit presents a picture of too many cooks spoiling the broth—commercial banks, regional rural banks and co-operative banks are fiercely competing among themselves but have been unable to relax the grip of usurious money-lenders in the villages.

No wonder, even today the institutional farm credit structure remains disorganised. Under the circumstances, the president of the Indian Banks Association (IBA) and the chairman of the State Bank, Mr P. C. D. Nambiar, asked the state governments recently to tackle the problem of recovery of agricultural loans, more than half of which could not be recovered. In his address at the recent annual general meeting of the IBA, Mr Nambiar rightly stressed the need to set up suitable machinery to expedite the recovery of agricultural dues, enact necessary legislation on the lines of the model Bill recommended by the Talwar Committee and what is most important, carry out an effective propaganda campaign in the villages on the need to repay the agricultural loans to enable the credit agencies to recycle the funds more effectively. Mr Nambiar could have added that commercial banks have done precious little so far in rural publicity about the need for prompt repayment of agricultural credit.

Serious anomaly

Another serious anomaly remains in the Integrated Rural Development

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Programme (IRDP) which appears to have been bogged down in the morass of problems before it could get off the ground. The Sixth Plan envisages assistance to 3,000 families per block spreading in 5,000 blocks whereas in reality the number of units which could be financed per block in backward areas would be much smaller. The question that has to be considered in this context is whether the rural areas have the necessary infrastructure for this purpose. Secondly, the credit needs of 3,000 families per block in 5,000 blocks might—on a conservative estimate—would require more than Rs 7,500 crores. Mr Nambiar has said that while it may not be beyond the capacity of the credit institutions to supply the amount, the implications of the massive deployment of funds of this dimension should be studied carefully. This apart, since the IRDP will be extended to all blocks in the country, banks will have to cater to the needs of beneficiaries scattered over a wide geographical area. One should not think, therefore, that it would be quite an easy task to cover 500,000 villages in the country. Since IRDP is expected to cover the poorest of the poor, the task of combining the IRDP with the National Rural Employment Programme (NREP), especially at the block level, should have to be seriously considered.

The main thrust of the IRDP programme is to cover at least 15 million people who live below the poverty line. To cover this, some wide-ranging measures are proposed to be taken to cover the administrative, planning, monitoring and credit utilisation aspects through the existing financial agencies operating in the countryside. The guidelines issued by the Planning Commission on block level planning envisages that the State Government should set aside 10 per cent of the divisible outlay of their Plans, the main aim being to cover "the poorest of the poor". This will raise several problems. First, the identification of this strata of rural poor all over the country would pose a formidable problem. It is being considered that a family of five with a total annual income of Rs 3,500 or Rs 700 *per capita* per year should be laid down as the guideline. But there is no survey of the people who earn this level of income all over the country, the census data either being perfunctory or not available in detail up to now. Secondly, the intended beneficiaries of the IRDP programme are land-based.

But this is not enough. In fact, the criterion, according to some, should have to be shifted from the land-based to income-based. Thirdly, there are many a sceptic who point out that the level of lending of the order of Rs 3,000 crores from the banking sector to the 15 million people may not be achieved by the end of the Sixth Plan quiquennium, notwithstanding the assurance given by the Banking Department of the Reserve Bank of India.

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Formidable task

The task may prove to be formidable in view of the following constraints: (1) The absence of bank branches in the remoter countryside, (2) inadequate staff in the branches to undertake a massive task of this nature, (3) the absence of field officers to undertake the survey work and (4) lack of enthusiasm among the banks to undertake risky agricultural operations. In fact, the lead banks have found to their dismay that they cannot gather the required information in the lead districts from other banks which are expected to cooperate with them in preparing the district credit plans. This apart, in undertaking the minor irrigation programmes, the banks find to their dismay that there is no adequate survey of ground water potential.

Furthermore, while the country aims at a white revolution, there is no adequate emphasis on the cattle development programme. Nor is there any emphasis on creating a marketing infrastructure for making the IRDP a success. Even the Khadi and Village Industries Commission has yet to spread its network to all the districts in the states, thereby suggesting the need for a more rapid expansion of the marketing facilities. But the biggest defect of the IRDP is the absence of an emphasis on the training programmes for rural youths who would undertake the rural development schemes. For this purpose, it will be necessary to set up composite training centres in all parts of the country.

It is a pity that before undertaking a massive task like the IRDP with an aim at improving the living standards of the poor and neglected sections of society, neither the Planning Commission nor the Government had laid the necessary stress on creating the required infrastructure. If the scheme does not click due to lack of foresight and planning, who will bale out the banks after their miserable performance? Under the circumstances, the banks and other credit agencies are understandably dragging their feet without being able to see any light at the other end of the tunnel. They have, meanwhile, nothing to look forward to except a plethora of problems. So the bouquets have to be shared instead of passing on the brickbats, especially by our policy-makers.

Bank finance for rural industries

By Y. C. SHARMA

THE important role of rural industrialisation in ensuring the balanced growth of the rural economy is well-recognised by the planners, economists and administrators all alike. With the steep rise in population, the land-man ratio is becoming increasingly unfavourable, and the pressure on land is threatening to be unendurable for variety of reasons. The number of land-owning farmers is decreasing, the traditional artisans are deserting their hereditary occupations in increasing number, and the class of landless labourers is expanding fast, who have to depend on nothing but agriculture.

It is a queer fact that though our population is increasing at the rate of 2.2 per cent per annum, or more, the number of traditional artisans mainly dependent on cottage industries has been declining fast with every census, and in 1971, there were only 7 million left in this category. Further, the vast number of Indian farmers (about 47 per cent) are only marginal farmers holding land less than five hectares. This explains one of the lowest income per capita of Indian farmers in the entire world. No doubt improved agriculture and better inputs, particularly more and more irrigation facilities, would improve the economic conditions of the farming community, but its beneficiaries would generally be medium and big farmers, mainly because there are too many people dependent on the land.

The real solution of the abject poverty and chronic under-employment and unemployment lies in diversification of the rural economy, and large-scale generation of productive employment in non-farm sector. In fact the Planning Commission had decided more than two decades ago to create 4.6 crores jobs between 1961-62 and 1976-77 to reduce the percentage of population dependent on agriculture from 70 to 60. But unfortunately the position has remained unchanged todate. It is absolutely necessary not only to stop the traditional artisans from joining the rank of agricultural proletariate, or migrating to the cities to become the scum of urban population, but also to divert a sizable number from agriculture to rural industries by making them an attractive source of income.

Present position

One of the major requirements of rural industries, like any other economic activities is credit, and it is extremely difficult and expensive for the poor resourceless artisans to secure adequate capital on reasonable terms for carrying on his industrial activity in an uninterrupted manner. All India Debt and Investment Survey 1971 conducted by RBI revealed that 39 per cent of the artisans in rural areas were under debt, with debt to assets ratio as high as 42 per cent. The institutional credit formed a meagre 4.8 per cent of the total credit given to the artisans. The cost of debts, according to the survey, was 18.5 per cent. However, in practice the rate of interest for many helpless artisans is reported to be not less than 24 per cent anytime; rather it may be as high as 48 per cent also in many cases. What makes it worse is the fact that the borrowing artisans are compelled as a part of loan terms, to purchase the raw materials from, and to sell the finished products to the money-lender-cum-trader alone at prices, which are invariably disadvantageous to the artisans. Thus the artisans are trebly exploited by the usurous merchants, who are the main source of finance to them. According to an estimate, the artisans as a class carry the heaviest burden of debt in the rural areas at an average rate of Rs 1,255 per artisan.

Apart from 70 lakh regular artisans in the country, an equal number can easily be estimated to be depending on the cottage industries as auxilliary means of income (with potentiality of becoming major source of income also, under favourable conditions). Calculated on the basis of average composite credit requirements of Rs 6,500 per artisan, both long-term for capital expenditure and short-term for working capital without rigid division, total credit requirement of 1.40 crore artisans in India can be easily estimated at Rs 9,100 crores. Against this background of huge credit requirements of rural artisans, the help extended by the financial institutions at present is wholly insignificant.

Agencies of institutional finance

The earliest organised efforts to cater to the credit requirements of artisans as a class were made through organising industrial co-operatives, particularly for the benefit of weavers. Though the co-operative structure of the country continues to be predominantly attuned to agricultural credit requirements, there were 40,100 industrial co-operative societies in India in June 1978 (the number may be about 45,000 now), out of which 14,367 were weavers co-operatives, 254 agricultural processing societies, and 24,874 other industrial co-operatives, with outstanding loans at Rs 12 crores, Rs 2 crores and Rs 12 crores respectively for the three groups. Further, there were nine industrial co-operative banks with Rs 23 crores as outstanding loans (Rs 6 crores medium and long-term, and Rs 17 crores short-term). In KVI sector there were in all 28,018 co-operative societies in June 1980, out of which 18,375 were financed by the Khadi & Village Industries Commission (KVIC) and state khadi & village industries boards. However, out of total, only 8,338 were reported to be working (2,252 alone were working with profit), and as many as 8,684 were reported to be defunt/dormant apart from 2,942 under liquidation. The KVI industrial co-operatives financed by KVIC and the state boards borrowed in all Rs 19.06 crores (Rs 17.94 crores from KVIC/state boards, Rs 0.45 crore from state governments 0.52 crore from co-operative banks and Rs 0.15 crore from others), against which Rs 6.37 crores were overdue. Thus it would be seen that while as much as 90 per cent of the borrowings of KVI co-operatives were from KVIC/state boards, and the contribution of co-operatives banks was wholly negligible, the vast majority of these co-operatives were as good as dead. The overall picture of the industrial co-operatives in general also is equally dismal.

The decision to extend the normal commercial banking facilities to the rural areas in a big way was yet another important step to cater to the credit requirements of the rural people, including the artisan class. This programme got special impetus after the nationalisation of the commercial banks in 1969. Table 1 presents the picture regarding expansion of banking activities in the rural areas in 11 years:

From the table it is clear that between 1969 and 1980 not only the absolute number of rural branches has gone up by about 750 per cent, but also the proportion of the rural branches in total number of branches all over India has also gone to 22.4 per cent to 46.6 per cent. However, deposits secured by the rural branches have grown in still higher proportion from Rs 145 crores to Rs 3.538 crores, which shows appreciable development of the banking habits in the rural areas. The amount of credit

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Mr Sharma is deputy chief executive Officer of Khadi and Village Industries Commission. The views expressed here are personal.

distributed by rural branches has also gone up from a meagre Rs 54 crores to Rs 2,016 crores over a 11-year period. One significant fact which emerges from the above figures is that a net amount of about Rs 1,500 crores has been drained off from the rural areas for utilisation mostly in the metropolitan areas. If the semi urban branches are also taken into account, the surplus deposits transferred to metropolis would come to about Rs 5,000 crores. Obviously, metropolitan cities continued to have a lion's share in the credit sanctioned by the commercial banks. There, the credit deposit ratio is 87.9 per cent against 57 per cent in the rural areas. Thus the credit policy of the commercial banks continues to be heavily weighted in favour of the metropolitan cities and also to some considerable extent urban areas.

The fact that the credit policy of the banks favours highly organised industrial sector is obvious from the Table 2.

Table 2 shows that during the year ending June 1980 medium and large scale industrial units availed of the credit to the extent of Rs 8,310 crores, coming to 38.2 per cent of the total credit sanctioned, as against the entire priority sectors getting Rs 6,970 crores only coming to 32.1 per cent of the total credits. Further amongst the priority sectors, the share of small scale industries was Rs 2,711 crores *i.e.* 12.5 per cent of the total credits. In this context it is important to point out that tiny sectors constitute only a very small part of the small scale industries sector, and in fact, its interests are substantially at variance from those of small scale industries, for in contrast to quite developed and sophisticated technology of the small scale industries, the tiny sectors employs only traditional or slightly improved intermediate technology.

Table 1 : Centre-wise distribution of branches, deposits and credit of all commercial banks : June-end 1969 and June-end 1980

Population group	June-end 1969				June-end 1980			
	Branches	Deposits (Rs crores)	Credit (Rs crores)	Credit-deposit ratio (Per cent)	Branches	Deposits(a) (Rs crores)	Credit(a) (Rs crores)	Credit-deposit ratio (Per cent)
Rural	1,832 (22.4)	145 (3.1)	54 (1.5)	37.2	15,101 (46.6)	3,538 (11.3)	2,016 (9.4)	57.0
Semi-urban	3,322 (40.1)	1,024 (22.0)	407 (11.3)	39.7	8,078 (24.9)	7,079 (22.5)	3,435 (16.0)	48.5
Urban	1,447 (17.5)	1,209 (25.9)	722 (20.0)	59.7	4,856 (15.0)	7,828 (24.9)	4,604 (21.4)	58.8
Metropolitan	1,661 (20.0)	2,287 (49.0)	2,426 (67.2)	106.1	4,384 (13.5)	12,993 (41.3)	11,421 (53.2)	87.9
Total	8,262 (100.0)	4,665 (100.0)	3,609 (100.0)	77.4	32,419 (100.0)	31,438 (100.0)	21,476 (100.0)	68.3

Notes : (a) Data relate to scheduled commercial banks as at the end of December, 1979

Figures in brackets indicate percentages to total

Rural : Population up to 10,000

Semi-urban : Population over 10,000 and up to 1,00,000

Urban : Population over 1,00,000 and up to 10,00,000

Metropolitan : Population over 10,00.000

Table 2 : Sectoral deployment of gross bank credit
(Including bills rediscounted with the RBI)

	June 1977		June 1978		June 1979		June 1980	
	Rs crores	Per cent	Rs crores	Per cent	Rs crores	Per cent	Rs crores	Per cent
I. Public food procurement credit ..	2,536	18.6	2,525	15.8	2,996	15.5	2,414	11.1
II. (a) Priority sectors	3,486	25.6	4,334	27.2	5,677	29.3	6,974	32.1
(i) Agriculture	1,381	10.2	1,726	10.8	2,288	11.8	2,911	13.4
(ii) Small-scale industries ..	1,460	10.7	1,756	11.0	2,252	11.6	2,711	12.5
(iii) Other priority sectors ..	645	4.7	852	5.3	1,137	5.9	1,352	6.2
(b) Industry (medium and large) ..	5,372	39.5	6,249	39.2	7,291	37.7	8,310	38.2
(c) Wholesale trade (other than food procurement)	1,053	7.8	1,424	8.9	1,612	8.3	1,863	8.6
(d) Other sectors	1,160	8.5	1,428	8.9	1,767	9.1	2,188	10.0
III. Gross bank credit (I+II)	13,607	100.0	15,960	100.0	19,343	100.0	21,749	100.0

Note : Data relate to major banks which account for about 95 per cent of gross bank credit.

The advances given by the nationalised banks under the differential rate of interest schemes would give some picture about the availability of institutional finance for the tiny sectors. (See Table 3)

It is significant to observe that despite the steady growth of DRI advances standing at Rs 140 crores in 1979, they accounted for mere 0.58 per cent of the total advances given by the banks.

The scheme of the lead banks was also devised in order to give a fillip to the banking activities in virgin rural areas. However, it is significant that in 398 lead districts alloted to various public sector banks, 5,330 new branches were opened by these banks up to December 31, 1979 in the lead districts, against 10,911 branches opened by these very banks outside their respective lead districts. It is clear from these facts, that while the lead bank scheme did contribute to the extension of the banking activities in the new areas, the attention of the lead banks was diverted more to areas outside their lead districts.

Regional rural banks

The regional rural banks form the latest category of financial institutions to develop banking activities in rural areas for farm as well as non-farm sectors. The RRBs have already made significant mark in the sphere of rural banking and within a short span of five years, they have amply demonstrated their capability to serve the purpose for which they were established. The superiority of RRBs as an agency of rural credit over the rural branches of the commercial banks lies in their relatively lower overhead cost, unassuming and low profile amongst rather simple rural folks, local participation in management, familiarity of the local staff with the people of the area and close association with the rural development agencies.

Table 3: Advances by public sector banks* under the Scheme of Differential Rate of Interest: 1972 to 1979

As at the end of December	Borrowal accounts (Lakhs)	Amount outstanding (Rs crores)	Percentage of DRI advances to total advances of the previous year
1972 ..	0.26	0.87	0.02
1973 ..	2.30	10.06	0.22
1974 ..	3.13	13.35	0.23
1975 ..	4.65	20.99	0.31
1976 ..	10.05	47.24	0.56
1977 ..	13.92	67.99	0.61
1978 ..	16.20	90.00	0.66
1979 ..	20.76	139.80	0.85

* Exclude data on six banks nationalised on April 15, 1980.

The Dantwalla Committee constituted by the Reserve Bank in 1977 to review the working of RRBs has highly commended their contribution towards improving quality and quantity of the credit flows to the rural areas. The committee observed that "RRBs with modifications in their organisation and functions can become a very useful component in the totality of the rural credit structure. In fact, we are convinced that such an institution is needed to make good some inadequacies in the rural credit system". The committee also pointed out that though strenuous efforts made during the past decades or so to put the primary agriculture co-operative credit society and farmers service society on a sound footing, failed to achieve the expected results. The co-operative credit structure should not be disturbed at the base level. In fact the RRBs could fill the gap in rural credit wherever it existed on account of inadequacy of co-operative credit structure. The committee envisaged that, over a period of time, there would be a total replacement of rural branches of commercial banks by RRBs and their branches in their respective commanding areas. The RRBs could co-exist with the district central co-operative banks also without any clash of interest. It is indeed gratifying that the number of RRBs has already gone up to 52 in the whole of country and they have carved out a distinct place for themselves in the field or rural credit. Their contribution in catering to the requirements of poor rural artisan with co-operation and help of the state khadi and village industries boards and district industries centres in many states has been found quite conducive to the growth of KVI programme.

Existing schemes

At present, the following schemes are operating to provide institutional finances to the rural artisans and entrepreneurs.

1. Differential rate of interest scheme.
2. Special schemes for financing handloom weavers.
3. Integrated rural development scheme.
4. KVIC interest subsidy scheme.
5. Reserve Bank of India scheme for cottage industry.
6. State governments scheme such as artisans Employment Guarantee Scheme of Maharashtra, and *Antiodya* schemes in Rajasthan and UP etc.

The KVIC interest subsidy scheme has come into force from April 1, 1977. Under this scheme, the KVIC institutions individual entrepreneurs and artisans taking loans from the bank for running KVIC units are required to bear the burden of interest on bank loan only up to the extent of 4 per cent per annum and the Commission undertakes to reimburse the difference between initial 4 per cent and the lending rate charged by the banks directly to the banks. The scheme is meant for medium and long-term loans for capital expenditure as well as the working capital requirements for short-term.

Further it covers all the financial institutions including the commercial banks, co-operative banks, refinancing agencies including IDBI, etc. It may be recalled that right from 1956 onwards, when Karve Committee for the first time suggested KVIC institutions going in for more and more institutional finance particularly for working capital requirements, various committees and working groups have emphasised the importance of involving the financial institutions in the development of KVIC sector. It is indeed gratifying that the Reserve Bank of India has included rural industries including KVIs in the priority sector for the purpose not only for the allocation of credit but also charging concessional rate of interest at 13.5 per cent per annum, on the advances given for the purpose of purchasing and supplying of inputs to, and/for marketing of outputs of the artisans and village and cottage industry's units. It is hoped, that with this significant step on the part of RBI the share of institutional finance in the development of rural industries sector will go on increasing steadily.

During 1980-81 KVIC not only took the advantage of cash credit limits to the extent of Rs 10.05 crores for the purchase of raw materials for cotton and woollen, khadi as well as village industries like non-edible oils and soap industry, cottage match industry and bee keeping industry, but also issued the eligibility certificates to 80 KVI institutions and 22 state khadi industry boards for a total amount of Rs 27.58 crores. However, the institutions are rather slow in availing the facilities for bank credit and it is estimated that during 1980-81 they would be in a position to utilise bank credit to the extent of about Rs 6 crores only (against Rs 4.5 crores in 1979-80) These figures of utilisation of bank credit

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are exclusive of the bank credit utilised under Artisan Employment Guarantee Scheme of Maharashtra to the extent of Rs 4.50 crores during 1980-81. The interest subsidy disbursed by KVIC in 1980-81 amounted to Rs 82.75 lakhs.

Future expectations

Though only a humble beginning has been made as yet regarding flow of institutional finance for the development of KVI sector and only about Rs 10 crores have been canalised from the banks to this sector against the total outstanding loans of Rs 250 crores at the end of 1980-81, KVIC has a very ambitious plan to employ more and more and bank finance to achieve its Sixth Plan target. It may be observed in this context that out of total requirements of funds for KVIC Sixth Plan at Rs 1,175 crores as much as Rs 520 crores are expected to be availed by way of institutional finance. In short fulfilling the targets of Sixth Five Year Plan would be impossible without involving the banks in KVI programme in a big way. Not only this, the Ministry of Rural Reconstruction, Government of India, has also visualised a very important role for the banks in implementation of its integrated rural development programme of which Industries, Services and Business (ISB) are important component. According to the scheme approved by the Government of India, only one-third of the total finance is to come as subsidy from the Government and the remaining two-thirds in each case is to be given as loan by the banks under IRD Differential rate of interest as well composite loan scheme would be applicable to all the *ISB/TRYSEM* beneficiaries including the KVIC sector. The banks would be closely associated at various stages of the implementation of the scheme right from the stage of preparing project profiles and construction of block level workshop.

KVIC has prepared model schemes in 13 village industries, which would facilitate lending by the banks to the individual entrepreneurs and artisans. They have been prepared fully keeping in view the requirements of economic viability of various schemes. The IRD scheme expects the officials of the lead banks to monitor the loans given by the banks, to the KVI sector in general and the *ISB/TRYSEM* beneficiaries in particular. The problems of non-financing or inadequate financing are to be referred to banking co-ordination committee at appropriate level. Thus the role of the banks in promoting rural industrialisation in the country is bound to assume greater and greater significance during the Sixth Plan period.

Problems and solutions

Despite the fact that there is a considerable appreciation and understanding in the higher circles of the role of institutional financing in the development of rural industries, its progress is not likely to be very smooth, for it is entirely a new field of activity for the bank officials. The credit policy of the banks has as yet been oriented towards big borrowers, for it involves lesser efforts, easier control and quick adjustments. On the other hand dealing with thousands of small KVI institutions and lakhs of individual rural artisans would definitely mean considerable inconvenience to the banks. The botheration increases for the banks not only on account of sharp increase in the number of the borrowers' accounts, but also owing to small volume of their operations, and lack of banking habits and the required financial discipline, to which they have to subject themselves for obtaining credit from the banks. Things are likely to become slightly frustrating, as the banks would have to deal with modestly educated office-bearers of small rural industries institutions, entrepreneurs and artisans. Rigid application of the limit of 10 kilometres from the rural branches of banks for sanction of loans to any KVI unit may also come in the way of speedy rural industrialisation.

Some positive steps will have to be taken without further loss of time to ensure that a scheme of providing bank finance to the rural industries units functions effectively. First of all the banks officers particularly at the branch level, would have to be properly and adequately oriented in the functioning and requirements of the rural industrial units. Similarly, special cells will have to be opened in all the commercial banks at the regional as well as national levels to give a push to bank finance in the rural industries. In this context, the clearance of KVIC model schemes by the banks' headquarters would pave the way of providing credit facilities, to the individual entrepreneurs and artisans in the field. As mentioned in the Industrial Policy of the Government of India, it should be insisted upon that a certain percentage of credit would be earmarked for the small scale industries, particularly tiny sector. Atleast 2/3rd of the loans advanced by RRBs should be for the benefit of the local rural people only, including the rural artisans. It would be still better if it is made obligatory on the part of the RRBs to sanction definite percentage of loans, say 10 per cent of all advances, for the benefit of tiny rural industry units.

Particular attention would have to be given to encourage and strengthen RRBs and ensure that they are given all those advantages which are already available to the co-operative sector, such as automatic registration of land, and building, exemption from the stamp duty, realisation of debt arrears as revenue recovery etc. Facilities of insurance cover, credit-risk cover, eligibility to obtain refinance from RBI and IDBI etc should be provided continued in case of RRBs without any watch. There should also be proper organisational set up in the Reserve Bank of India to look after RRBs' working.

Role of banks

It is to be emphasised that in the complex economic conditions prevailing in the rural India, the commercial banks or RRBs should not remain contented with the traditional role of lender alone. They will have to carry on their activities in the wider content as the friend, philosopher and guide of the rural industries units, trying to understand their problems in a sympathetic manner encouraging them to take the maximum possible advantage of bank finance as well as to guide them in their functioning particularly regarding maintenance of their accounts. In short the banks may have to assume the role of catalytic agents in the process of rural industrialisation of India.

Further, it is also to be appreciated that credit is not an end by itself, but is a means only to enable the rural industrial units to function efficiently and smoothly. Mere sanction of bank credit may not be enough to put rural industries units in proper shape. Therefore, along with adequate credit facilities, some important supporting measures would also have to be taken simultaneously, particularly regarding the regular supply of the required raw materials at reasonable prices for the rural industries, and marketing of their products in a profitable manner to reap the full benefit. A chain of raw materials banks and rural marketing organisations would have to work hand in hand with the banks to produce the desired results in the field of rural industrialisation.

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31st December 1979		**STATEMENT OF POSITION** **Capital and Liabilities**		**31st December 1980**
Rs. 5,00,00,000		Capital (paid up)		Rs. 5,00,00,000
8,00,00,000		Reserve funds & other reserves		10,00,00,000
1572,41,84,919		Deposit & other accounts		2099,05,76,838
76,31,18,260		Borrowings from Banks & Agents etc.		51,01,23,237
42,99,14,232		Bills payable		41,06,87,844
105,49,69,617		Bills for collection per contra		124,84,42,982
62,96,05,037		Other liabilities		39,17,22,472
165,20,88,096		Acceptances, Endorsements etc., per contra		230,31,57,606
	3,75,98,396	Profit for the year	4,25,64,948	
	2,00,00,000	Less transferred to Reserve Fund	2,00,00,000	
	1,50,00,000	Transferred to contingency	2,00,00,000	
25,98,396		Balance transferred to Central Government		25,64,948
2038,64,78,557				2600,72,75,927

31st December 1979	**STATEMENT OF POSITION** **Property and Assets**	**31st December 1980**
Rs. 218,14,08,612	Cash in hand and with banks	Rs. 356,24,49,074
2,00,00,000	Money at Call and short notice	2,00,00,000
471,17,89,786	Investment in Govt. & Other Securities	601,16,53,662
1021,31,84,008	Advances	1172,29,08,615
105,49,69,617	Bills for collection per contra	124,84,42,982
165,20,88,096	Acceptances, Endorsements etc., per contra	230,31,57,606
1,61,54,484	Premises	2,91,69,597
8,32,21,797	Furniture & Fixtures	9,71,90,496
45,33,60,747	Other Assets	101,20,72,949
3,01,410	Non-Banking Assets	2,30,946
2038,64,78,557		2600,72,75,927

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Federal farm credit system of USA: Towards financial consolidation

By B. H. ELAVIA

AMERICAN agriculture is a highly developed and efficient profession providing the country an abundance of quality food and fibre through periods of depression, inflation, conflict and peace. It is the nation's largest and perhaps the most essential industry.

The total assets of the farmers were valued at $ 950 billion and total farm debt was $ 158 billion on January 1, 1980. Farmers' average debt-assets ratio and debt equity ratio were 16.6 and 19.9 per cent respectively. The typewise classification of farm debt was; real estate debt $ 83 billion, non-real estate debt $ 70 billion and Commodity Credit Corporation loans $ 4.5 billion.

Agricultural was a highly capital intensive business with the capital investment per man ($ 120,000) in production agriculture being two to three times the investment in most non-agricultural industries. The input-wise cost of agriculture in 1980, was land 20 per cent, labour 15 per cent and capital 65 per cent. And yet, labour continues to be substituted by capital.

Only through the use of increasingly large amounts of borrowed capital have agricultural producers been able to gain the necessary efficiency from enlarging the scope of their operations, apply science and technology to land or to pass the ownership of agricultural resources to the succeeding generation.

The Federal Farm Credit System (FCS) is designed to provide specialised credit which the sophisticated American agriculture needs. The fast growing financial needs of the system in the recent past has led to innovate methods of financing, which should be a matter of interest to all concerned in our country, with mobilising funds, to meet the ever increasing demand of farm credit, through the co-operative credit system. Indian agriculture has come of age and will soon have to learn to live without subsidised credit and to chart out its share of loanable funds from the national and international money markets.

This paper makes a humble attempt to present the structure of the Federal Farm Credit System of USA and to examine the recent innovation in its financing pattern.

Performance of FCS

The Farm Credit System is able to obtain all the funds demanded by farmers and ranchers directly from the money markets of the country and abroad. Thus, it functions as residual suppliers of loan funds to the farmers. Not only the farmers borrow more money from FCS than from any other source, but the system's share of farm debt fluctuates with the change in activities of other lenders.

FCS made loans totalling $ 59 billion during 1979, a substantial 29 per cent increase over the $ 245 billion in loans made a year before.

The system's share of net debt flow increased from 24.9 per cent on January 1, 1978 to 35.6 per cent on January 1, 1980. Two factors contributed to the spurt, first, high demand for loan funds and second, a shortage of loanable funds from commercial banks.

The FCS's loans outstanding totalled $ 57.8 billion, on December 31, 1979. The increase in loans outstanding over the year was 24.3 per cent, the highest rate of the decade. The system's share of the total farm debt outstanding worked out to 29.2 per cent. 1979 was a land-mark year in the history of FCS. The system emerged as the biggest lender of real estate farm debt. It's share of the total was 35.5 per cent, which exceeded that of 'individuals and others' (the traditional leaders) which was 34 per cent, as on January 1, 1980.

Among the lenders of the non-real estate debt, FCS ranked second after the commercial banks. On January 1, 1980, the shares of FCS and commercial banks of the total non-real estate debt were 23.5 and 40.7 per cent, respectively.

Structure

Credit is the key to success of American agriculture. The FCS is designed to improve the income of farmers and ranchers by furnishing sound, adequate and constructive credit and closely related services to them, their cooperatives and to selected farm related businesses necessary for efficient farm operations. The system also provides credit for rural homes, to producers and harvesters of aquatic products and their associations.

This is accomplished through the three component parts of the System — Federal Land Banks and Federal Land Bank Associations, Federal Intermediate Credit Banks and Production Credit Associations, and the Banks for Co-operatives. Each plays a key role in filling the unique credit requirements of its borrowers.

The FCS is owned by nearly a million American farmers and 4,000 of their marketing, supply and business service cooperatives.

In each of the 12 Farm Credit Districts throughout the United States there is a Federal Land Bank, a Federal Intermediate Credit Bank and a Bank for co-operatives. Besides these 36 banks there is a Central Bank for Co-operatives in Denver, Colorado. These 37 banks constitute the FCS.

The Federal Land Banks make long term loans secured by first mortgages on farm real estate through local Federal Land Bank Associations which numbered 505 as on December 31, 1981. The loans are from 5 to 40 years for any agricultural purpose and for other requirements. Common purposes include the purchase of farms, farm land, equipment and live-stock; refinancing existing mortgages and paying other debts; constructing and repairing buildings and financing other farm, farm home or family needs. Since the banks are primarily agricultural lenders, credit extended for other than agricultural purposes is dependent on the agricultural assets of the borrower. Owners of farm related businesses may borrow to purchase or refinance necessary sites, capital structure, equipment, and for initial working capital.

Loans to rural residents may be made for the purposes of building, buying, remodelling, refinancing or repairing a rural home.

The banks can make any sound loans. The amount of credit extended, based on the credit worthiness of the applicant, cannot exceed 85 per cent of the colleteral taken as security.

The 12 Federal Intermediate Credit Banks (FICBs) provide loan funds to

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more than 425 local Production Credit Associations (PCAs) with a total of nearly 1,900 offices. They provide funds to PCAs either by discounting the notes of farmers given to the PCAs or by making direct loans to them. The banks also discount farmers' notes given to about 125 other financial institutions. The FICBs may also participate with the PCAs in making loans. Similarly PCAs may participate with one another in making loans and may also participate with other institutions in financing agricultural producers, including commercial banks.

PCAs make loans for almost every farm, farm home and farm family need. Most loans are for production purposes, such as meeting current farm expenses and mature within a year. However, many loans are made for capital purposes, such as buying equipment and live-stock and may be written for period upto seven years.

PCAs also make loans for the repair, remodelling of non-farm rural homes, for farm related businesses and to fishermen, in latter case loan may be made upto 15 years.

There are 12 district banks for co-operatives one in each district and one Central Bank for Co-operatives in Denver, Colorado. Each district bank makes seasonal and term loans for farmers' marketing, supply and business service co-operatives in its own territory. They also lend to societies of producers' of aquatic products. The Central Bank for Co-operatives participates in larger loans originated by district banks for co-operatives.

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Consolidated systemwide bonds and notes

The Farm Credit Banks obtain most of their loan funds through the sale of securities. Based on a long and successful history, these securities represent a sound investment in American agriculture. The Federal Land Banks issued their first securities in 1917. The Federal Intermediate Credit Banks followed in 1924 and the Banks for Co-operatives in 1950. The outstanding credit quality of the Farm Credit Banks has enhanced the market acceptance of Farm Credit securities on a worldwide basis, with an active secondary market trading outstanding issues.

Farm Credit Banks were initially capitalised with government funds, Government capital was repaid over a period of years ending in 1968.

In recognition of the origin of the system, revolving funds are maintained in the US Treasury to permit the Governor of the Farm Credit Administration to make temporary investments in the stock of the Federal Intermediate Credit Banks and the Banks for Co-operatives in the amounts of $ 112 million and $ 149 million respectively. Additionally, the Secretary of the Treasury may deposit upto $ 6 million with the Federal Land Banks. The Governor of the Farm Credit Administration also follows a policy of co-operative consultation with the US Treasury when securities are issued.

The Farm Credit Banks maintain a Fiscal Agency to issue, market and handle their securities, as provided in the Farm Credit Act of 1971. The Fiscal Agency located in New York city, manages a selling group of approximately 170 dealers who offer Farm Credit Securities.

The Fiscal Agency-selling group structure has been effective in distributing Farm Credit securities on a worldwide basis to all types of investors — commercial banks, savings and loan associations, individuals, insurance companies, states and municipalities, foreign banks and governments, and others.

The American agricultural community's financial needs have increased dramatically over the past 10 years and are projected to increase further in the years ahead. To assure the continued acquisition of funds in an orderly and efficient manner, the Farm Credit Banks introduced the Federal Farm Credit Banks consolidated Systemwide Bond in 1977. As the secured joint and several obligation of the 37 Farm Credit Banks, this bond combines the strengths of the Federal Land Banks, the Federal Intermediate Credit Banks and the Banks for Co-operatives.

The Systemwide Bond was initially introduced to complement bonds issued by each of the bank groups and is now the sole bond issued by the Farm Credit Banks. This transition was accomplished on January 1, 1979. Bonds previously issued by the Farm Credit Banks will continue to be available in the secondary market until maturity.

Federal Farm Credit Banks consolidated systemwide notes are the secured joint and several obligations of the 37 Farm Credit Banks. These notes, which are sold on a discount basis with maturities of 5-270 days, are used to complement short-term borrowings, to provide a source of interim funds between bond sales, and to supply the banks with flexibility in securing funds during periods of unexpected demand. The Farm Credit Banks maintain lines of credit of about $ 2 billion with commercial banks and other financial institutions to back up these notes.

Record of stability

The banks composing the Farm Credit System have never failed to pay principal and interest on their obligations when due, in the last fifty years. With this history of unquestioned success, the Farm Credit Banks stand today as important financial institutions through which investors can profitably participate in the agricultural industry and farmers can obtain capital for producing the nation's food and fibre.

With the growing financial needs of Indian agriculture, it is time for us to establish a direct 'link' between the co-operative credit system and the national money market. Such a 'link' may not only provide increasing quantum of funds for agricultural development but more importantly, it may instill self-confidence and financial discipline in our fast deteriorating co-operative credit system. Of course, in the present situation the co-operative bonds or notes will have to be fully guaranteed by the state. Detailed mechanism of the 'link' may be worked out to suit the local conditions of our country — but the experiment based on the American model, brooks no delay.

No innovations or new services

By S. G. SHAH
Our Banking Correspondent

BY the time this comes out in the print the latest data on the progress of the banking system will be released by the RBI and the Government. It is a measure of their efforts to build up an image of the banking industry in terms of physical achievements—Rs 40,000 crores of deposits, 36,000 branches, the vast increase in rural and semi-urban branches, rural and agricultural advances and bringing new classes of people into the fold of priority sector advances. (*See Document and Statistical Profile*).

In all the current fanfare about the progress made by the banking system since nationalisation, a few elements have been totally ignored. They are new services and innovations, quality of banking services, monitoring of commercial advances and total indifference towards performance either of the bank or of the borrowers. It is the analytical content of these four elements that should determine the tone of banking progress rather than the mere enumeration of the progress made in accounts and amounts, branches and business, new classes and masses, 20 points and four pillars of banking and so on.

New services

Whenever bankers think or talk of new services or innovations, they talk in terms of a wide variety of deposit schemes and interest payment or gift arrangements (which incidentally are common to almost all the banks). They rarely go beyond these into the real area of actual and potential innovations.

The entire new area of the 20 point programme has at its base lending to new classes of masses, at higher risks and very costly retail banking. They all have forced bankers into developing new and different techniques of lending and monitoring. Yet bankers talk only of the new classes and masses at all forums, not of the new techniques of assessing, lending, supervising and recovery. In these professional and systems areas, plenty of work has been done, but it has not been documented and discussed anywhere.

Further some ingenious young bankers have developed new techniques of lending and monitoring, but their ideas, experiences and expertise have not been pooled together and shared. And much of the vital achievements have disappeared through retirements and resignations.

As a result, the banking system has not made many significant changes in its systems and procedures of lending to the smaller people and businesses. The styles and systems of lending and supervision for smaller accounts are also the same as for the large business accounts. The result has been to push up administrative costs of lending and to push down the quality of loans, since everyone is so busy and no one has the time to attend to important things of banking life as against the urgent ones.

The entire range and scope for new services has been confined to gimmicks like all-night and Sunday-banking. The realities of clearing and collections, pass-books and statements have been totally neglected. As a result, the public sector banking is being discredited on such elementary issues.

Vast scope

. Banking services have a vast new scope, which has remained totally unexplored. Banks have tried to go into tax consultancy and failed miserably. But they have not even attempted to go into financial consultancy which is of the very essence to their working.

As a result of Tandon and Chore Committee information systems banks are required in any case to assess the quality and performance of the financial management of large enterprises whom they lend. Yet banks have not provided them services to develop, compile and implement information, costing, control and communication systems within large enterprises. For these services, the enterprises have gone to chartered and cost accountants and management consultants and paid them fantastic fees. If banks had provided these services they would have earned those incomes. More than that bankers would have come closer to the realities of financial management, would have got better insight into the working of enterprises and would have been better able to supervise their borrowers.

As it is, bankers lost both, the incomes and the opportunities. Further since cost and chartered accountants started doing the figure work and presentation of accounts, bankers' ability to read, interpret and use the data remained very stagnant. The faculties and talents which they should have developed remained very much in abeyance. The final stroke was added by the lack of time about which bankers have started pleading. Since they had no time, they did not read their customers' statements. The information system has failed both because customers did not submit information, as also because bankers did not read it.

There is yet another area in which bankers have failed to provide a new service which was very much required. When management of industrial enterprises was simple, their managements used to depend upon bankers for financial management expertise. But as the complexities and subtleties of financial management increased, industry started employing professionals, accountants, MBAs, lawyers. As the expertise increased within the enterprises, bankers' role in advising on financial management started declining. Eventually, banks have now come to a stage where they have become totally irrelevant to the financial management problems of the enterprises.

Priority sectors

Bankers' funds are now increasingly being committed for priority sectors and in meeting liquidity and reserve requirements of the RBI. As a result the share of industry in bank lending is declining. In fact, the RBI, Government and banks have been declaring as a matter of policy, that industry should not look to bank funds and should raise its own funds or generate them internally in an increasing manner. Thus, as their reliance on bank funds declines, they will become increasingly independent of bankers also who can provide neither funds nor expertise.

As bankers' earnings from loans to industries decline, they could increase them by providing increasingly more and more services and charging for them. But this can be done only if the bankers have better financial management expertise than that possessed by industry. But so far, bankers have not shown any evidence of their ability to do so.

Thus, in the entire range of new services and innovations, bankers have made a miserably poor show. The future lies with those banks who can offer better services.

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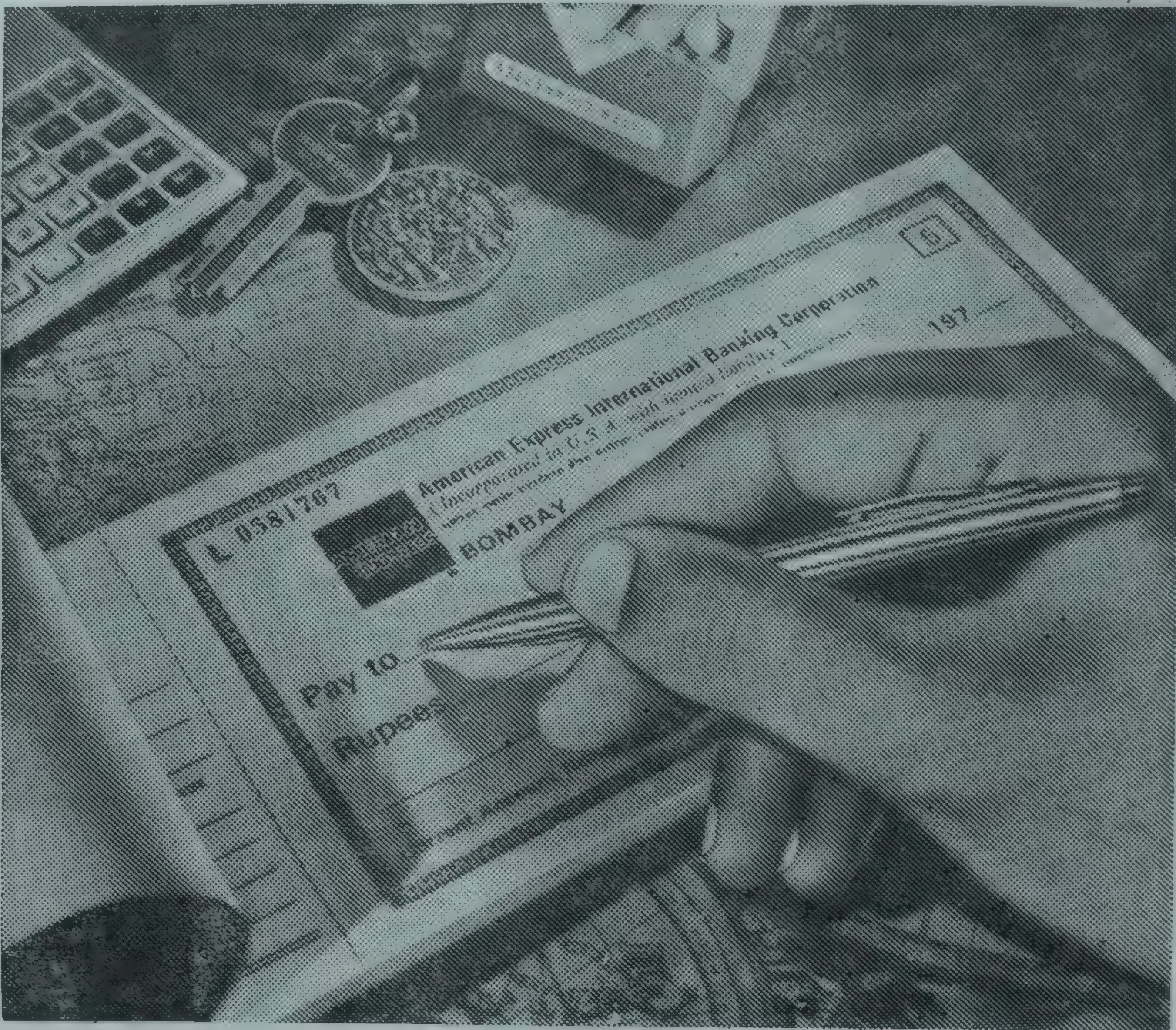
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Total indifference

Bankers have become experts in stating their performance goals and declaring that they are taking several measures to achieve them. But they are very poor in assessing the effectiveness of their measures and in evaluating the results actually achieved. Thus right from the Government and RBI to the smaller bankers they all take several measures, but none of them care to evaluate them by comparing whether the objects for which they were taken are realised or not.

Take the simple case of overtime in banks. All of them from the Government to the smallest person in banks are convinced that overtime is abused and demoralises people. Banks spend Rs 31 crores on overtime a year. Many steps are taken to control it. Yet it goes on increasing. Take another instance of cash in the banking system. The RBI is generating more new notes a month than the soiled notes it can destroy in a year. As a result there is no vault space for notes, remittances of cash are costly and cash ratio of banks is high. Banks lose interest on unwanted high cash they accumulate to the tune of Rs 800 crores a year. Yet the ingenuity of bankers has not been able to create 2,000 currency chests at every taluka centre in the country.

The RBI credit policy is another instance. The declared objective of credit policy is to contain inflation, curtail speculative uses of credit, and promote productive uses. Many things are done in the name of these credit policies—and none of them are successful in achieving their objective. Yet that does not seem to matter. The central bank authorities seem to think: "Whether the objectives are achieved or not is a different matter : but we must take the actions with the ostensible objective of achieving them."

The profitability of banks is under pressure. Cost structure is high, systems and procedures clumsy, and there is lot of wasteful and duplicate work. Yet bankers are primarily concerned with complaining about their thin margins on funds. Very few of them have the vision, insight, courage or conviction to change the systems and procedures to curtail costs or promote efficiency.

The main function of a banker with reference to a borrower is to understand his needs and problems and promote his productive activities. This is the essence of bank lending and of the personal relationships in banking. Yet, the reality is that the banker has no time to understand, let alone time to help the borrower. Bankers give appointments that they do not observe. They keep their valued customers waiting for hours in their parlours. What is worse, their customers have to wait for days together for obtaining even such a worthless appointment.

Even when the appointment does materialise, the customers find that bankers have not read the papers and have not done their homework. Very often the papers are not traceable. A querry is raised at the slightest pretext and the appointment ends unceremoniously to await a similar fate later in the second round.

Borrowers have become so used to these ways of the bankers that no one ever raises a question about such arrogant behaviour of bankers. During such meetings, no decisions are taken (we will consider and let you know later!) before weeks if not months! Even if decisions are taken, they are not recorded or confirmed. They are sacrosanct.

It is no longer a banker's problem whether he helps the customer to obtain a good result or whether he destroys all opportunities for doing so. A fruit processing industry unit has a long record of inadequate production, and accumulated losses. At long last, times have changed and it is getting LC after LC from foreign importers. But the bankers have now lost faith in him. When the banker should have been alert and should have restrained the borrower, he was not even aware of what the borrower was doing and how he was accumulating losses. Now when the borrower is turning the corner and is in a position to generate cash to repay the banker, the banker has woken up to the realities of past years. But he is able to see only the past, not the present and future. Even if the borrower had made losses in the past, to-day he is able to generate large amount of surplus cash. But the banker has allowed a specific packing credit of Rs 3 lakhs against LCs of Rs 17 lakhs—not even a revolving packing credit.

If the borrower questions, how he can produce, the banker argues: "It is not my problem. You may or may not be able to produce goods. But I will not give you packing credit, because you have made losses in the past. Even if you can produce and sell now at a profit, I do not wish to take the risk."

The situation is so upside down that bankers keep on financing when the losses are made and stop doing so when the borrower is in a position to earn profits and wipe out the past losses.

Similarly in a synthetic weaving enterprise. The entrepreneur has made huge losses due to past follies—at that time the banker went on financing him merrily. Now when he has started paying interest and instalments from profits of Rs 6 lakhs a year, the banker has become restrictive. He argues, "Why should I take the risk of financing you?"

The bankers have a much larger stake in both the enterprises, and would recover their bad loans if they were to lend wisely now. But the bankers don't care if the losses continue and the enterprise is destroyed—their only concern is that they do not wish to take risks.

Part of the weakness lies in their system of credit supervision. Since bankers have lost the art of supervising credit well, they are not confident that they will be able to recover what they lend now, although their chances of doing so are much better now than before. This therefore brings us to the question of monitoring and supervising lending.

Monitoring and supervision of loans

Among the many contradictions of nationalised banking is this conflict and dichotomy between theory and practice. All bankers talk of lending now against productive potential and not against security. But none of them have the courage or conviction of lending against productive potential if they do not have the security.

This is because they do not know the art of supervision. All of them still rely on monthly stock statements and details of debtors and creditors. If they were to shift from this to the simple daily reporting of sales realisation, variable costs, contribution, and net surplus, and monthly data on turnover and age distribution of stocks, debtors and creditors, they would have a much better control over their borrowers.

But bankers do not have the time the understanding and the patience. The old breed of a challenging banker who was able to recover Rs 7 lakhs by advancing Rs 5 lakhs is no longer there. Today's young bankers specialise in lending Rs 7 lakhs to lose Rs 10 lakhs and in refusing Rs 5 lakhs when the chance to recover Rs 7 lakhs does arise.

These are the internal problems of nationalised banking that should be subjected to greater attention and debate on this anniversary date rather than concentrating on physical achievement of branches, accounts and amounts.

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Customer service and bank marketing

By S. G. BAPAT

BANKING as a service industry is a matter of great concern to almost everybody. With nationalisation, quite naturally, public expectations have increased. One one side, the customer of the bank is expecting a lot, while the bank managements in general have been very conservative. A recent news item (July 12) says—"The approach of many bankers so often continues to be overcautious, their procedures very difficult to follow and perhaps, even the policies laid down by managements fail to either percolate to the lower levels or get translated into the right spirit". The quotation is from the speech by Mr N. D. Tiwari, Union Minister for Planning and Labour, at the time of convocation at National Institute of Bank Management.

The Banker, a leading journal, puts a cover feature: "Its high time, bankers take the bull by horns" (See May 1981 issue). It is very clearly expressed that the first and foremost weakness of banking industry is deterioration in customer-service in banks. Banking is essentially a service industry and it has to sustain and grow on the quality of service. The survival and growth is actually influenced by the ability of the banker to render qualitative services to different classes of customers rather than the volume of business. It is really a matter of concern that even professionalisation of bank managements has not made any perceptible change in the level of customer service.

It is not a very uncommon experience for the customer to be tossed between the counters. It is wellknown and oft repeated that there are three basic parameters of good customer service, namely, (i) courtesy extended to the customers whenever they are on the bank/branch premises; (ii) the transactions should be handled as speedily as possible; and (iii) helping attitude and accuracy in transaction. How far the customers are happy with reference to these three aspects is anybody's guess. It has also been mentioned quite aptly by the Talwar Committee that the assessment of customer service of banks should take into account the four factors namely, (1) demands on and expectations from banks; (2) quality and job knowledge of bank personnel; (3) attitudes and motivations of bank employees; and, (4) back-up systems and procedures.

The report was submitted on March 31, 1977 but there are hardly any visible signs of implementation of the recommendations seriously, for example, recommendation No. 73, "The problem of collection of outstation cheques should be tackled on the national level. The eventual objective in this regard should be to develop a system and structure for national clearing for which purpose a national clearing authority may be set up immediately". Or take the case of recommendation No. 78—"Customer should be reimbursed for loss of interest and commission/charge if any should be waived in case the credit on account of cheque/bill sent for collection is unnecessarily delayed due to banker's fault." This recommendation is also not being taken seriously.

Usually, the bank managements accept the allegation about deterioration in customer-service while trade unions maintain silence on the issue. It appears that there is a feeling of helplessness. The staff complains about inadequate manpower and growing workload. In addition to the volume of business, complexity of functions has also grown. It is also argued:—"Bank staff cannot be immune to the happenings in surrounding environment. Since the standards of service are deteriorating everywhere, banks cannot be an exception." Some of these points are understandable but certainly these are not acceptable. Thus, it is obvious that unless the awareness of "customer-service" is consciously built up, there will be little hope for growth or even survival.

One more reason why urgent attention should be given to the aspect of customer-service is that in recent years the profitability of commercial banks is declining. From June 1969 to March 1980, branch offices increased from 8,300 to 31,900. Deposits have increased from Rs 4,650 crores to Rs 31,690 crores. The advances have increased from Rs 3,600 crores to Rs 21,450 crores. It is true, that the gross income has increased but ratio of net profit to income has decreased. The following table will illustrate the point.

Per cent ratio of net profit to income

Year	Nationalised banks (14)	Private sector top 13 banks	State Bank Group
1968	3.23	2.33	3.19
1970	2.59	2.89	2.23
1975	1.69	2.20	1.65
1977	2.20	2.03	1.31

One need not go into the causes of decline in profitability. One obvious reason is "low productivity in the banking sector (viewed in terms of quality of service)". The staff is definitely capable of much better performance.

Better bank marketing

The word "bank marketing" may create initial resistance in the mind of conservative and overcautious banker. Unfortunately, there has not been a unified and organised effort towards "bank marketing" as such in India. Even individually, much attention on regular basis has not been given to bank marketing and customer service aspects. One of the reasons may be that all these years, banks have been operating in the sellers' market. Perhaps, banks had ready customers and large waiting lists. However, things are definitely changing very fast. In an article "Banking in the Eighties" (*Journal of the Institute of Bankers*/April-June 1980) it is particularly mentioned that competition for deposits would be particularly intense during the next decade. The bankers are bound to compete with each other for deposits. There are large number of advertisements of the corporate sector attracting attention to the lucrative rates offered on deposits. Naturally, therefore, the ability to convert external environment into economically viable propositions would be the prime task for 1980s.

It is not very clear whether the top managements in banks have thought of bank marketing in serious terms. There is a ray of hope because a few articles are being published on "Need for Bank Marketing" or "Marketing muscle for money managers", etc. It is true that more detailed and comprehensive literature on "Bank

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marketing" is awaited, but the top management can and should initiate discussions on various innovative ideas.

At this stage, it may be worthwhile to note the difference between "selling" and "marketing". If "selling" would mean a routine function of rendering existing services to existing customers, the term "marketing" would in addition, cover innovative ideas of new services to existing customers and new services to new customers.

Marketing has been rightly described as the beginning and end of all the productive activities. Theodore Levitt has said "the primary business of any business is to stay in business and to do that you have to get and keep the customers". The concept of marketing can be appreciated as "a corporate approach to identification or creation of customer demand, followed by the provision and selling of the relevant goods and services at profit". On the same lines, bank marketing may be defined as "identification or creation of customer demand followed by provision and selling of customer–satisfying services as the key to achieve bank's corporate objectives".

If top management takes sufficient interest in 'bank marketing', staff can be educated to give due attention to "customer service". "Customer is the most important visitor on our premises... He is not an outsider on our business, he is part of it... We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so". All these slogans which are already acting as wall decorations in bank offices today may get life and the staff may be better informed and better motivated.

Customer-service is only one aspect of bank marketing. Bank advertising should also be more imaginative. Advertising should be regarded as communication arm of marketing. In one of the surveys conducted on bank advertising, customers have expressed their media preferences as radio, TV, short films, personal letters, posters and others (like newspapers, magazines, folders, calendars, bus and railway tickets, etc). When the specific question was posed. "What do you expect from the banks in the near future?" The answers are :—collective advertising, more purposeful advertising, more advertising budget and better goodwill. Banks should carry out independent studies on regular basis to study the reactions of customers and prospective customers.

Such type of studies will help the bank marketing managers in two respects : (a) To locate the points where customer-education is required. (Personal counselling and advertising may be so planned that customer will be properly educated). The sources of dissatisfaction or misunderstanding can be located in time and effort can be made to remove misunderstanding etc. (2) To locate the points of staff training in relation to customer service.

In modern times, effort is made to locate the problems and classify the solutions into two parts : (a) Training solutions and (b) non-training solutions. Bank managements can use the studies of "customer service" and plan its training activities to train the staff through case studies and role playing etc. This type of training is likely to be more meaningful.

In 'bank marketing', various other aspects will also have to be considered, namely, market segmentation, product differentiation and market strategy. Market research on continuous basis is no doubt very useful. Fortunately, a lot of valuable record is available with the banker. It should be used for market research.

In any case "customer satisfaction" is the central theme in bank marketing and hence in order to meet the challenges of 1980s, bank marketing activities should be adequately planned and implemented.

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Need for restructuring of banks

By B. RAMACHANDRA RAO

THE banking system in the country has been growing rapidly since the nationalisation of the 14 major scheduled commercial banks in July 1969. Branches of scheduled commercial banks increased to 33,103 as in September 1980 from 8,262 in June 1969. Of the new offices, more than half were opened in unbanked centres. The average population per bank branch declined from 65,000 to 17,000 as at the end of December 1979. While opening branches, care was taken to see that more licences were granted to open branches in backward districts so that there could be equitable distribution of bank branches in the country. In 1970-71 there were 85 banks in the country with 11,541 offices. The figure of offices rose to 29,757 in 1978-79. It shot up to 31,889 during 1979-80. The present figure is in the neighbourhood of 34,000. But still the coverage is not complete. Even if we open one branch for every 20 villages, it will take another 50 years to cover the entire country with bank branches.

In June 1969, the aggregate deposits of the banks were at Rs 4,646 crores only. As on June 5, 1981, the deposit figure has crossed Rs 39,000 crores, which is no small achievement. No doubt, however, compared to the population of 68 crores in the country, there is still a lot of leeway to be made up in the deposit mobilisation efforts by the banks.

Coming to the advances, the figure was only Rs 3,599 crores in June 1969. The present figure in June 1981 is at Rs 26,178 crores. With so much credit being in deployment, one can easily visualise the extent of economic output/wealth created by this investment in the country. Banks have now started the credit camp approach to go to the borrowers and disseminate credit for maintaining a balanced credit deposit ratio in places where disparities exist particularly in the priority sector lending.

In the area of priority sector advances also lot of headway has been made by the banks in the country. Table 1 will reveal the progress made in this area between 1969 and 1979.

In 1969, the total of priority sector advances constituted just 14.9 per cent of the total advances and in December 1979, it had shot up to 34.4 per cent. These advances carry comparatively lower rate of interest and to that extent the banks are sacrificing their profitability in the interest of the socio-economic development of the down-trodden neglected and weaker sections of the economy.

In order to re-shape the priority sector lending and in view of the importance to the 20 Point Economic Programme, a working group headed by Dr K. S. Krishnaswamy, the then Deputy Governor of RBI, has recommended the following sub-targets in the weaker sections under priority sectors to be achieved by the nationalised Banks :

1) 40 per cent of total lending to priority sector and at least 16 per cent of the total advances should be to the agricultural sector by 1985.

2) The direct advance to weaker sections should reach level of at least 50 per cent of the total direct lending to agriculture including allied activities by 1983. The weaker section in the agricultural sector would comprice:

(a) small and marginal farmers with land holdings of five acres or less and landless labourers;

(b) persons engaged in other allied activities where borrowal limits for such activities do not exceed Rs 10,000.

3) All small scale industries with limits upto and inclusive of Rs 25,000 should be treated as the weaker section in this category. Advances to this weaker section should constitute 12.5 per cent of the total advances to small scale industries by 1985.

4) Banks should strive to even-out the regional imbalances in the deployment of credit in the best feasible manner by formulating suitable viable schemes in consultation with state development agencies for all the beneficiaries identified under the 20-Point Economic Programme.

Coming to the differential rate of interest scheme, it has come to stay to help the people coming under the purview of weaker and neglected sectors of the economy. As percentage to aggregate advances, credit under DRI scheme rose from a mere 0.02 per cent in 1972 (Rs 87.3 lakhs) and 0.94 per cent (Rs 140.96 crores) in December 1979.

The banking system in the country comprises the following group of banks as on June 1980 and the number in each group and branches they are having are marked against each group :

	No. of banks	No. of branches
1. State Bank of India	1	5,293
2. Associate Banks of SBI	7	2,447
3. Banks nationalised on 25-4-1980	6	2,726
4. Nationalised Banks	14	15,356
5. Regional Rural Banks	73	2,678
6. Other scheduled commercial banks	33	3,724
7. Foreign Banks	14	129
8. Non-scheduled commercial banks	5	66
9. All scheduled commercial banks	148	32,353
10. All commercial banks	153	32,419

Table I : Priority sector advances

(Rs in crores)

	June 1969	December 1979
1. Agriculture		
(a) Direct Finance	40.21	2,004.57
(b) Indirect Finance	122.12	557.55
2. Small Scale Industries	251.07	2,322.54
3. Road Transport Operators	5.49	446.38
4. Retail trade and small business	19.37	473.50
5. Professional and Self-employed persons	1.91	133.79
6. Education	0.80	8.65
Total	440.97	5,946.98

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Out of the above 32,419 branches as on June 1980, population group-wise distribution of banks' offices can be seen in the following table :

	No. of branches	%, to total
Rural	15,101	46.6
Semi-urban ..	8,078	24.9
Urban	4,856	15.0
Metropolitan/Port Town	4,384	13.5

Particularly for the past 1½ years, the branch expansion has been going on steadily but slowly, the prime reason being lack of personnel for new branches. The service boards take a long time to give the hands and the banks have no power to recruit permanent hands themselves. Old branches are becoming understaffed when hands are removed to open new branches. It is high time that either the BSRBs should function quickly and effectively to give hands to the banks on demand or against indents or the entire recruitment should go back to the banks only to make expansion really meaningful and to be done with the time horizon.

Apart from the above banks, the system also includes the following institutions :

1) Co-operative banks

2) Post office savings banks

3) Agricultural Finance Corporation

4) Agricultural Refinance & Development Corporation

5) Other term lending institutions such as IFC, SFCs, SIDCs, IDBI, ICICI NIDC, IRCI and NSIC

6) UTI & LIC

7) Proposed Exim Bank to handle foreign exchange business

8) Proposed NABARD to help agricultural development in the country.

Taking the commercial banking set up alone as described above, it is felt that the number of banks in the public sector which is now 28 is too large and they may not be able to deliver the goods as expected of them as efficiently in the future years. While very few banks have taken to innovative banking going off the beat and track of traditional banking, many are still seeped in money lenders' activities, talking still in terms of security and no risk to be taken for advances. Because there are many bank branches in the same places, unhealthy competitions are going on and what is really needed is competition in service which is very rarely seen. Banks should diversify their activities and merely selling old wine in new bottles is no good. There is plenty of scope in merchant banking activities for the banks and some banks can even take up deposit management for companies.

Bigger branches in the cities due to their size are becoming inefficient to impart quality service. Some banks are, therefore, trying to reduce the size of their bigger branches by shifting foreign exchange, SSID, SB Accounts etc to separate branches exclusively handling each one of these functions.

Ever since the nationalisation of the further six banks last year, there is a move to demand the restructuring of the banking system in the country to deliver goods effectively and efficiently to the public. This year there was a banking seminar also in Baroda organised by the RBI to discuss the restructuring of the banks in the country. So many experts and others have suggested several models of restructuring. The solution is not simple. The existing banks themselves do not want to lose their identity. But, however, the RBI and the Government are keen on reducing the number from 28 to a minimum of six or so. There were reports sometime back that RBI has already cleared a plan of restructuring and now the whole thing is with the Government awaiting clearance.

But it may be mentioned that structural changes of the banking system alone cannot bring about the desired results. For good result and performance, the spirit of service, the involvement in the job, the sense of belonging and the job satisfaction of the employees are badly required in the present context of agitational approach of bank employees all over the country in one form or other, affecting productivity and rendering disservice to the clientele. Unless these good virtues are ensured amongst employees, qualitative growth of banking is not possible and structural changes may only facilitate quantitative growth with downward trends of productivity and profitability year after year. If employees can take a pledge that 'no challenge is too big' to play a dynamic role for them, banking is bound to witness a revolutionary change in the country both in contents and in the manner of functioning.

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मुलीच्या अगर कन्येच्या उज्वल भवितव्या साठी

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७ कॅश-सर्टिफिकिटे
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Savings through banks

By V. PRASANNA BHAT

IT may look paradoxical and also odd elaborating on 'Why should you invest in bank?' when people are in fact asking 'why the hell should we invest in banks?'. But then, despite the growing dissatisfaction with the services rendered by the commercial banks and also the not so attractive returns on deposits offered by them, when compared to other avenues like company deposits, the banks have been doing an apparently marvellous job of mopping up public deposits. These commercial banks are currently adding Rs 5,000 crores to Rs 6,000 crores per annum to their existing deposits and this works out to 70 per cent to 80 per cent of what they had in all (aggregate of bank deposits) at the time of nationalisation in 1969. However, this is not to justify the nationalisation of banks.

Over the past decade there have been a variety of competitors with numerous attractive schemes seeking to mobilise public savings and they are offering a stiff competition to banks in mobilising public deposits. Mention-worthy among them are public and private companies, chit funds, Unit Trust of India, company shares etc. Of course, government bonds, post office certificates, Life Insurance Corporation and other trustees securities and debentures do mop up a large chunk of surplus with investing public due to the inherent tax and statutory benefits they offer.

A discussion as to 'why invest in bank deposits' is relevant in the present context, especially since even many bank managers are not fully aware of the plus points in favour of bank deposits. It may not be surprising to see even managers of commercial bank branches privately making critical comments and observations against bank deposits in comparison to company deposits and chit funds.

In spite of these odds against bank deposits, if the banks are continuing to flourish it is due to quite a few subtle yet significant advantages provided by them. Investors look for safety, security, liquidity, accessibility or proximity, tax benefits and convenience apart from the rate of return. Few decades ago interest was the only reason for which money's liquidity was parted with and there were authors putting forth theories of 'interest' on the basis of liquidity preference alone. But now, the times have changed and liquidity preference is just one of the several factors taken into consideration for deciding the rate of interest. Furthermore, interest is not the only consideration for the savings are deposited or investments are made and the reasons are very many. It makes an interesting analysis to view the public deposits with banks from each of these angles.

Safety: Bank deposits are safe. Chit funds have become proverbial 'cheat funds'. Instances of companies failing to refund the public deposits have been reported and are on the increase. It is a pity that even Reserve Bank of India or Central Government cannot make the defaulting company to repay the amounts to depositors with the existing provisions. The pathetic depositor can seek remedy through law and legal measures only. Certainly a depositor does not wish to be deadlocked in a legal battle, with a company which is a costly proposition and highly time consuming. Of course, from the date of decree the depositor gets the paltry rate of return on his investment, namely the court rate. It is interesting to note that, to protect the interest of small investors insurance cover is made available by a Deposit Insurance Scheme. DICGC covers bank deposits upto Rs 30,000 in individual cases and the premium for such coverage is met by the commercial banks. Not that deposits above Rs 30,000 are unsafe in banks; if it is a scheduled bank Reserve Bank takes care of the depositors' interest. This unique protection of insurance accorded for deposits is not available in any other type of investment.

Security: A scheduled commercial bank is fully controlled by the directives of the monetary authority namely Reserve Bank of India, lest the bank squander its resources. The banks are not only inspected by the internal auditors of the banks but also by the Reserve Bank officials and statutory auditors, which ensures proper supervision and control including proper investment of the resources mobilised by the banks. Further, nearly 40 per cent of the bank's deposits are made to be invested in trustee securities, bullions and with Reserve Bank in their interest free current account, thus ensuring a good security and liquidity from the point of view of investing public.

Liquidity: Bank deposits are always considered as liquid assets. While banks are obliged to maintain liquidity as per statutory stipulations (like SLR and NLR), the investing public too are paid back their deposits in cash whenever demanded or contingency arises. The facility of obtaining a loan against a bank deposit and the advantage of premature closure of a term deposit (with a reasonable period of notice) does not exist in the case of company deposits and debentures. Though the bank interest is slightly lower, the facilities of a deposit loan or a premature closure guarantees liquidity of the bank investment. In many companies the repayments are not promptly made on due date and there are cases where the investor has lost the complete investment itself.

Accessibility and proximity: Thanks to the mass banking concept, the banks have spread their network of branches even to inaccessible villages in India. In comparison to company deposits or debentures the proximity and accessibility available in the case of a bank branch is far more and hence convenient. The head office or registered office of a company is usually far off and the investor is usually made to deal with such companies through the medium of postal communication. The commercial bank manager is normally available for discussion with the public in the matter of investments and is usually trained in offering the appropriate counsel.

Tax benefits: While the fact that interest income on bank deposits upto Rs 3,000 per annum is exempted from income tax is a well known concession, there is yet another concession which is not so well known. Bank deposits up to Rs 1,50,000 are considered as a specified financial asset qualifying for exemption under Wealth Tax as against company deposits which are fully chargeable under Wealth Tax. Another disadvantage in the case of company deposits is that income tax is deducted at source if the interest payable on such deposits exceed Rs 1,000 per annum and therefore the investor is inconvenienced by seeking the refund thereof at a later date. Interest on bank deposits can be drawn at convenient frequencies and also quarterly compounding is admissible if the same is allowed to be accumulated under a scheme. The compounding facility is not normally available in company deposit schemes.

Convenience: The various bank deposit schemes are tailor made to suit the convenience of the investing public and can be suitably matched to the saving capacity of the individual. Deposits rang-

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ing from daily collections to term deposits upto ten years are available only in the case of banks. Cheque facility is available for saving deposits and the procedures are simplified affording operational convenience. For large depositors banks offer free services like remittance, carrying out standing instructions like payment of LIC premium, electricity and water bills. Such other agency services like acting as attorney or trustee etc, are available for bank depositors. The facility of lockers is also afforded to bank depositors.

It may even be argued that banks invest in schemes and such projects as envisaged and directed by Government and Reserve Bank of India or rather bankers deploy their resources as per stipulations of national priorities percolated down to branch levels through credit plans. However, this does not interest very much the investing public as they are concerned mainly with the above points apart from the rate of return on their savings and investment

Cultivating banking habits helps the nation in generating wealth and employment. Despite, the apparently appreciable progress made on the banking front during the last decade our *per capita* bank deposit is far less when compared to international standards. It may also be surprising to note that only about thirty lakh people in India have company shares. While the capital shyness of Indian investing public is understandable due to the taboo attached to the word 'share' and also due to the lack of education, there is no reason why the concept of mass banking should not make the desired impact on the investing public.

Our banks have to go a long way in getting closer to the investing public and also in the matter of inculcating the banking habits. No doubt, too many restrictions and restraints on the banks by the monetary authorities and the Government have made it really difficult for the banks and they have been deprived of the benefits of healthy competition and the needed independence for expanding in a bigger way. The present growth is commendable when compared to the restrictions and the impediments. A bank deposit is far beneficial and dependable for any middle class or poor class investor and in order to convince such an investor from being misled by the lucrative interest factor alone (offered by a company or chit fund), a bank manager must be fully conversant with advantages accruing from a bank deposit.

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Financing expansion: Banks or financial institutions?

By G. J. KHUDANPUR

IN the past decade or so, as a consequence of inflationary rise in prices, the project costs have shot up to such an extent that it is well nigh impossible for any of the existing companies, whether government or non-government, to finance their expansion programmes without substantial external financial assistance. Published data regarding capital raised (paid up) under consents/acknowledgements of proposals by both non-government and government companies clearly demonstrate a steady declining trend in (paid up) capital raised.

In the case of non-government companies the total capital raised during 1979 at Rs 200.6 crores was lower than Rs 258.0 crores raised during 1978. The decline was shared by all the instruments of capital issues. The trend continued in the first half of 1980 as well, during which period non-government companies raised Rs 74.0 crores as against Rs 114.1 crores raised during January-June 1979. A similar trend was noticeable in the case of government companies also. The total capital raised by government companies during 1979 aggregated to Rs 43.4 crores as against Rs 55.9 crores raised during 1978, showing a decline of 22.4 per cent. Similarly there has been a substantial decline in loans — other than those granted by public financial institutions, banks etc, — which are exempted from control of capital issues. Hence companies, whether government or non-government, have no alternative but to resort to borrowing from either banks or the public financial institutions.

Selecting a financing agency: A variety of considerations influence the choice of a financing agency by a company. Availability and cost of credit, a degree of supervision exercised by the financing agency, ease of operation of the account are some of the important considerations. However, availability continues to be the most important single factor.

Since public sector units and cooperative units have relatively secure sources of finance for "approved" programmes of expansion, attention will be focussed here primarily on the problems of units in the private sector only.

Availability of credit: Availability of credit is a function of many variables. It varies with the size of the unit (large, medium, small or tiny), location of the unit (developed area, backward area), type of activity (priority sector or non-priority sector) and the type of unit (existing or new). The purpose and duration of the loan and the existence of special schemes of finance are also important factors influencing availability of credit.

Medium and large companies: In spite of much flaunted official policy to promote small scale industry, medium and large scale industries have expanded much more rapidly. They are also the principal beneficiaries of finance, both direct and indirect, provided by the term lending institutions. A principal factor has been the availability of financial expertise and close liaison with the top personnel of term lending institutions. Further the ability of such companies to absorb profitably the loans sanctioned and consequently to repay the loans on schedule makes them better security risks. They also have adequate security to offer and borrow large sums and as such they are preferred customers.

The medium and large units usually borrow directly from term lending agencies when the amounts borrowed are large, and indirectly when projects are relatively small but are bankable and eligible for refinance. The reasons for this are obvious. This procedure reduces the time lag in securing loans. They also secure bridge finance from commercial banks against loans sanctioned by term lending institutions.

A scrutiny of data on direct financial assistance sanctioned and disbursed by IDBI, IFC, and ICICI reveals that while the amounts sanctioned show a steady increase from Rs 544.4 crores in 1977-78 to Rs 725.1 crores in 1979-80, disbursements have not kept pace with sanctions. However, there was a steep rise in disbursements, during 1978-79 and a marginal decline in 1979-80 (see Table 1).

Data on disbursements to existing as well as new companies are also presented in Table 1. The data reveal that the share of new companies in direct loans disbursed declined from 63.7 per cent in 1977-78 to 35.7 per cent in 1979-80, while during the same period the share of existing companies increased from 36.3 per cent to 64.3 per cent. This is a clear proof of the ability of existing companies to attract more funds than the new companies because of their previous contacts with the financing agencies and their excellent past record regarding utilisation as well as repayment of loans.

What is expansion?

At this stage it is necessary to clarify what is meant by expansion. Normally it is presumed that addition to block capital means expansion. This covers the cases of both expansion of existing units through purchase of balan-

Table I: Direct financial assistance sanctioned and disbursed by IDBI, IFCI & ICICI

(Rupees crores)

Years April-March	Direct loans		Direct loans disbursed to		
	Sanctioned	Disbursed	Newly-established companies	Existing companies	
				New projects	Expansion of existing capacity, modernisation etc.
1977-78	544.4 (100.0)	282.1 (100.0)	179.8 (63.7)	22.8 (8.1)	79.5 (28.2)
1978-79	573.8 (100.0)	426.9 (100.0)	248.5 (58.2)	32.0 (7.5)	146.4 (34.3)
1979-80 .. .. (provisional)	725.1 (100.0)	424.2 (100.0)	151.5 (35.7)	45.8 (10.8)	226.9 (53.5)

Note: Figures in brackets are percentages of total.

Source: Report on Currency and Finance (1979-80) vol. I pp. 228 Table VIII—9

Dr Khudanpur is a member of State Planning Board, Maharashtra Government.

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cing equipment, or through addition of a new products line or project at the existing location. However, modernisation presents a tricky problem since it involves reconditioning or even replacement of old machinery. For our purpose we treat modernisation also as expansion. This is all the more necessary as separate data are not available on modernisation.

There is also the problem of new units set up in backward areas by units existing in metropolitan centres. The few studies that exist on locational policies clearly reveal that existing units expand by setting up new units in backward areas to avail of concessional finance under special schemes. In fact, bulk of the new units are organised and set up by the existing units and not by new entrepreneurs. However, for our purpose these are treated as "new" units, rather than as "expansion". From data in Table 1 it appears that in 1979-80 new units secured 35.7 per cent of the finance while old units secured 10.8 per cent of the finance for new projects and 53.5 per cent of the finance for expansion/modernisation of existing units. This indicates roughly the dimension of the problem.

Locational policy

As was indicated earlier, availability of finance is the single most important factor influencing the choice of a financing agency. Taking advantage of this fact an organised and planned effort is being made by the various state governments to attract industries to backward areas of their states by providing concessional finance, and by providing infrastructure facilities (land, water, power, effluent disposal facilities). This has led to certain distortions which have been commented upon by experts from time to time. For instance, Mr M. D. Godbole has noted in his book *Industrial Dispersal Policies* (Bombay, 1978), in Chapter 7 that as a result of concessional finance relatively more capital intensive units have moved into backward areas. Mr Godbole's study revealed that investment in machinery and equipment as a percentage of total fixed capital was higher in developing areas than in Bombay, as was the proportion of fixed capital to total capital. Further labour cost as a percentage of total cost was conversely found to be lower in developing areas than in Bombay.

The availability of state and Central government incentives pertaining to sales tax loan and capital subsidy were considered to be responsible for this phenomenon.

The recent study on locational policy commissioned by the Bombay Chamber of Commerce and Industry and carried out by the Tata Economic Consultancy Services, Bombay also bears out this conclusion (vide paragraphs 5.14, 5.15 and 5.16), if anything, more forcefully. This fact should be noted for future action. For it implies that if employment generation is to be emphasised, then different types of incentives will have to be provided.

Small-scale industry

Unlike medium and large scale industries which preferred to borrow from term lending agencies, the small scale industries showed a distinct preference for bank credit rather than for credit from term lending agencies. This was explained by the fact that small scale industries find banks more easily accessible than the term lending institutions. Also they find it much more difficult to comply with the procedures of the term lending institutions — which appear quite cumbersome to them. The small scale units also find it much more difficult to maintain satisfactory liaison with the term lending institutions. As such they prefer to finance their expansion through loans from commercial banks. The financial assistance to small scale units from term lending agencies such as SFCs and SIDCs is generally availed of by units located in the industrial areas developed by SIDCs. The finance from other term lending agencies reaches small scale units indirectly through automatic refinancing arrangements.

The commercial banks are the most important source of finance for expansion of small scale units. The term lending agencies are also gradually pumping in larger and larger funds. Among the term lending institutions IDBI & SFCs dominate the scene the former being relatively more important (Table 2).

The commercial banks extended to small scale industry term loans amounting to Rs 360.5 crores during 1977-78 and Rs 432.2 crores during 1978-79. The term lending institutions advanced Rs 181.8 crores in 1978-79 and Rs 293.6 crores in 1979-80. Thus it is seen that the term lending institutions are making greater efforts to help small scale industrial units.

Backward areas and new entrepreneurs

Next we consider the problem of financing new units and units in backward areas. In these areas the term lending institutions play a major role. The relevant data are presented in Table 3.

The massive efforts being made by term lending institutions may be seen from the fact that disbursements moved up from Rs 693.8 crores in 1977-78 to Rs 1,262.7 crores in 1979-80 thus recording an increase of more than 80 per cent in two years. The disbursement in backward areas has also recorded a substantial increase.

Similarly the advances to new units and to small entrepreneurs have also re-

Table 2: Financial assistance sanctioned and disbursed by term-lending institutions to projects in the small-scale industries sector

(Year: April-March) (Rupees crores)

Institutions	1978-79		1979-80 (provisional)	
	Sanctioned	Disbursed	Sanctioned	Disbursed
(1)	(2)	(3)	(4)	(5)
IDBI	147.1	86.7	265.4	160.9
IRCI	0.2	0.3	0.4	0.3
SFCS	134.2	93.1	189.1	130.6
SIDCS	2.5	1.7	3.4	1.8

Source: Report on currency and Finance (1979-80) Vol. I. pp. 229 Table VIII..II.

Table 3: Assistance sanctioned and disbursed by financial institutions*

(Rupees crores)

Years April/March	Total		Of which Rupees Loans		Backward Districts or Areas	New/small entrepreneurs
(1)	Sanctioned (2)	Disbursed (3)	Sanctioned (4)	Disbursed (5)	Disbursed (6)	Disbursed (7)
1977-78	1,187.4 (24.4)	693.8 (16.2)	1,045.7 (24.4)	589.4 (16.4)	266.5 —	38.4 —
1978-79	1,420.1 (14.6)	967.3 (34.1)	1,214.8 (12.0)	851.6 (39.5)	367.8 —	49.3 —
1979-80 .. .. (Provisional)	1,989.7 (40.1)	1,262.7 (30.5)	1,683.1 (38.5)	1,088.3 (27.8)	428.5 —	53.8 —

* Covers IDBI, IFC, ICICI, IRCI, LIC, UTI, SFCs and SIDCs/SIICs

Notes: 1. Figures in brackets are % variations over the previous year.

2. Figures in columns 6 and 7 do not include assistance—sanctioned by LIC & GIC and its subsidiaries.

SOURCE: Report on Currency and Finance (1979-80) Vol. I pp. 227, Table VIII—8.

corded a handsome increase. In fact more assistance has flowed to new entrepreneurs through term lending institutions than from all other sources put together.

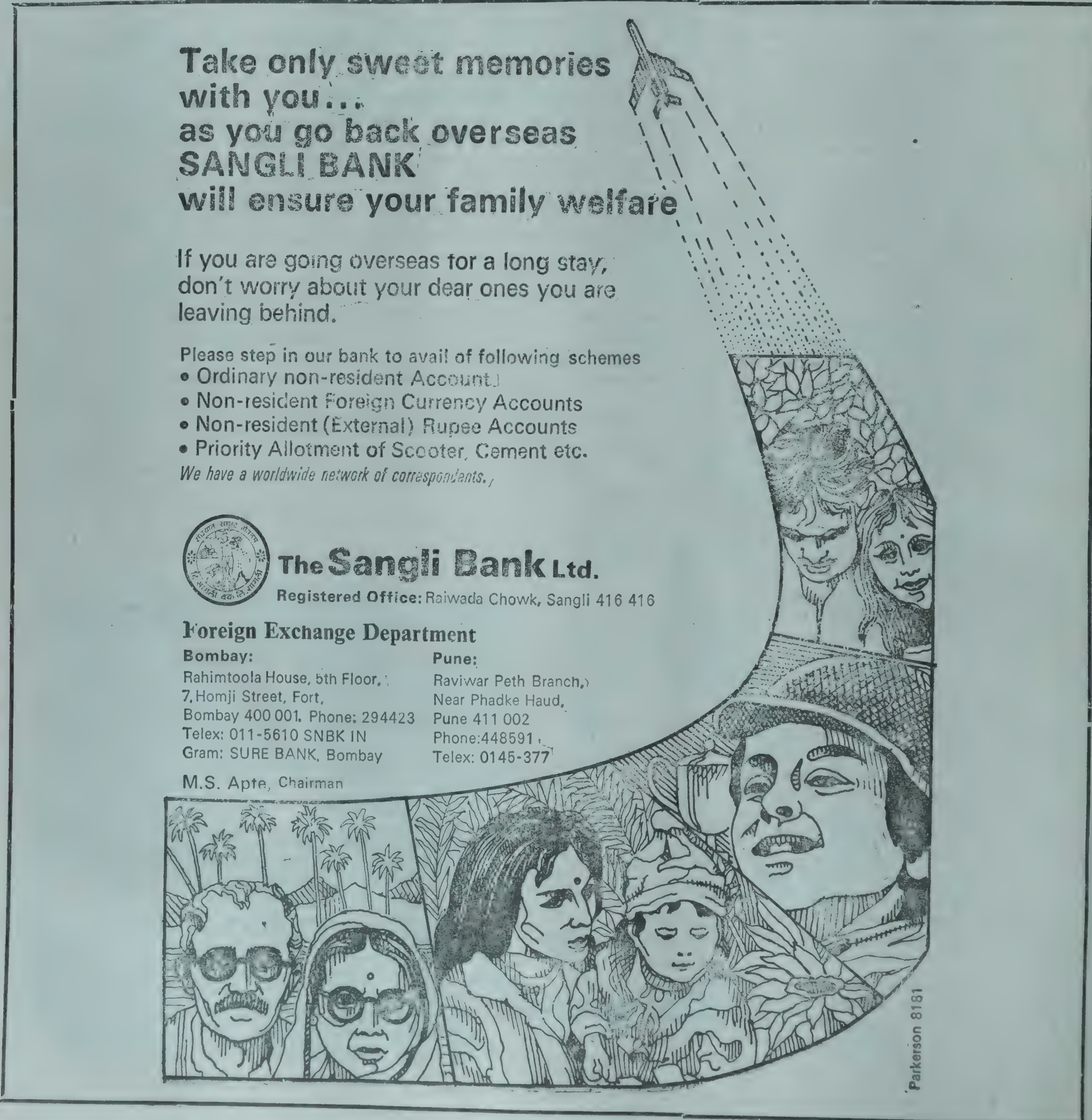
The commercial banks have given highest priority to financing small road and water transport operators. Between June 1978 and June 1979 an increase of Rs 118 crores was recorded in advances to this category.

Conclusions

Medium and large scale units have shown special preference to borrowing directly from term lending institutions. They are in a specially advantageous position to avail of the financial facilities extended by term lending institutions. They use bank loans primarily as bridge finance.

Small scale units prefer bank loans for financing their expansion. This is partly because the amounts are small and the banks are easily accessible. The small scale units in industrial areas find it convenient to avail of concessional finance made available through SFCs. Otherwise they generally avoid term lending agencies because of cumbersome procedures and difficulties in establishing liaison.

Units in backward areas generally take advantage of special schemes of concessional finance offered by term lending institutions. Similarly new units, new entrepreneurs and units from priority sectors avail of special schemes of concessional finance whether offered by banks or term lending institutions. The conclusion is, therefore, inevitable that availability determines the choice of the financing agency.



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State co-operative banks: Problem of surplus funds

By G. R. PATIL

WITH a small beginning for mutual help and support based on self-help, co-operative credit societies in the country have grown over the last seven decades into full-fledged co-operative banking institutions with large resources at their command.

In view of the possible impact of their operations on the monetary and fiscal policy of the country, after two decades of regulation of the commercial banks, co-operative banks too were brought under the same piece of legislation by extending to them, from 1966, provisions of the Banking Regulation Act, 1949. While co-operative banks have been thus reckoned as part and parcel of the national banking structure they are yet subjected to differential treatment with reference to dual control at the hands of Reserve Bank as well as the Registrar of Co-operative Societies and also with reference to regulation of their operational policies by the Reserve Bank itself through DBOD in respect of the commercial banks and the ACD in respect of co-operative banks.

This dichotomy in the control and regulation system gives rise to difficulties in the operation of the co-operative banks. These difficulties assume significance particularly in case of co-operative banks in progressive states like Maharashtra, Gujarat etc which have attained a level of growth and progress at which they find it necessary to break new grounds, with reference to both mobilisation of resources as also their deployment. Some of the co-operative banks in the progressive states are, in recent years, faced with the problem of gainful utilisation of their funds.

In the absence of adequate avenues for deployment of resources within their territorial jurisdiction, they are forced to keep the surplus funds with the commercial banks in short-term deposits, side by side with the existence of co-operative banks in the less developed states which are hard pressed for finding necessary resources for meeting the legitimate requirements of co-operative societies.

Thus, for example, over the last five years, the Maharashtra State Co-operative Bank has been compelled to keep large funds in call deposits with commercial banks, the maximum investments for the five years being as follows :

Calendar year	Maximum investment in call deposits with commercial banks (Rs. in crores)
1976	66.5
1977	92.50
1978	35.00
1979	103.95
1980	177.65

Nationwide balancing factor

Faced with this problem, co-operative banks have represented to the Reserve Bank that they should be allowed to break the regional barriers and extend their operations beyond state boundaries so that the co-operative banking complex in the country could emerge as a nationwide balancing centre. This is a mere extension of the idea of the concept of the state co-operative bank in each state as a balancing centre for co-operatives. It is with this idea that the demand for National Co-operative Bank as a federation of co-operative banks in the country had emerged. The added advantage claimed for such an organisation is that, being an autonomous organisation, it would be in a position to work and regulate operations of the co-operative banks in the country with much more flexible approach than the present regulation by the ACD of the RBI, which, as a central banking authority of the country, is obviously biased heavily towards its regulatory role which is bound to prove a handicap to the developmental role of the co-operative which they are expected to discharge.

Another dimension of the nationwide grid of co-operative finance could be financing of national level co-operative federations like NAFED or NCCF which today secure loans from the nationalised banks exceeding Rs 100 crores. Such financing needs permission from the Reserve Bank under Credit Authorisation Scheme. Even here, the Reserve Bank comes in the way of co-operative banks. The nationalised banks secure necessary permission from the DBOD much more easily and quickly than the state co-operative banks which follows a very dilatory approach in granting credit authorisations for financing national co-operative federations. This is the experience of more than one state co-operative bank in the country which provoked their National Federation to protest very strongly against this attitude of the Reserve Bank.

Another solution

Another solution to the problem of surplus funds with co-operative banks would be to seek gainful avenues outside the co-operative sector. Here again the demands of the co-operatives is to extend the scope of their operations to meet the requirements of many government corporations which are also engaged, like the co-operatives themselves, in nation-building activities. Thus, for example, the operations of the electricity boards, or the warehousing corporations or the state transport or the agro industries development corporation, etc are really complementary to the activities of the co-operatives in the direction of rural transformation. It would, therefore, be quite appropriate that the co-operative banks should be allowed to meet the requirement of such corporations.

In Maharashtra alone there are about 50 government corporations, of which just about five or six fall in the category of agro-industrial corporations and hence the willingness of the Reserve Bank, much against its will, to allow co-operatives merely to finance government corporations engaged in agro-industrial activities is not going to lead them too far. This may, at best prove only a palliative just to soften their criticism of the Reserve Bank.

If, therefore, a true solution to the problem of surplus funds with co-operative banks is to be found it is necessary to give up the insistance on adherence to many of the traditional tenets of the co-operative banking policy, particularly with reference to prohibiting business with clients other than co-operatives and arbitrary restrictions about the area of operation on the activities of the co-operatives. Co-operation has now developed from an ameliorative movement based on mutuality into a full-fledged economic system, just like a capitalist or socialist system. We are today planning for financial assistance between co-operative movements, in different countries of the world. It would thus be an anachronism, in this era of global co-operation, to adhere to the unrealistic, regional and sectoral restrictions on the activities of the co-operatives at home.

Mr Patil is chairman of Maharashtra State Co-operative Bank Ltd.

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Commercial banks' branch expansion

The following is the text of a Reserve Bank of India press release issued on the eve of 12th anniversary of bank nationalisation.

THE year ended June 1981, the twelth year of the nationalisation of 14 major banks, witnessed further remarkable progress in the branch expansion of commercial banks. No fewer than 2,773 new bank offices were opened during the first ten months (July 1980—April 1981) of the year. Unbanked centres continued to receive the special attention of banks. Three out of every four new offices were opened in such centres. The number of such offices actually opened was 2,062, against 711 offices opened in banked centres. With the opening of 2,773 new bank offices during the ten-month period from July 1980 to April 1981, the average population per bank office for the country as a whole came down to 19,000 as of April 1981 from 20,000 in June 1980 (based on mid-year population estimates); the average as of June 1969 (before nationalisation) was 65,000.

With the 2,773 bank offices opened during the year up to April 1981, the total number of new bank offices, opened since July 1969 and up to the end of April 1981 comes to 27,668, of which more than half *i.e.*, 15,227 offices have been opened in unbanked centres. The total number of bank offices as at the end of April 1981 was 35,192, against 32,419 in June 1980 and 8,262 in June 1969.

Out of the 2,773 new offices opened during the period July 1980-April 1981, the 28 public sector banks accounted for 1,784 offices, regional rural banks for 762 offices and private sector banks for 227 offices.

Rural centres continued to have a significant share in branch expansion during the year 1980-81. The number of rural bank offices at the end of April 1981 was 17,230 (representing 49.0 per cent of the total number of offices), against 15,101 offices (representing 46.6 per cent of the total) in June 1980. As of June 1969, it may be noted here, the number of rural bank offices was only 1,832, representing 22.4 per cent of the total 8,262 offices.

As in the previous years, the relatively underbanked states accounted for a significant share of the new bank offices opened during the year under review. Following the establishment of a large number of new bank offices in these states, the average population per bank office has gone down in all of them.

The progress made by commercial banks in branch expansion in the past year was in line with the broad objectives of the branch licensing policy evolved by the Reserve Bank in 1978 covering the three years 1979 to 1981. The objectives were opening of additional bank offices in deficit districts (*i.e.* districts in which the average population per bank office, was above the national average of 20,000), in rural and semi-urban areas in order to bring them on par with the national average; a time-bound programme to cover all unbanked block headquarters in the country by bank offices before the end of 1980; establishment of new RRBs and opening more branches of exising RRBs wherever necessary; allowing Lead Banks to open more branches in their lead districts to enable them to discharge their lead responsibilities. These broad objectives have, by and large, been achieved.

A new branch licensing policy, covering a longer period of 39 months from January 1982 to March 1985, is being finalised. The new policy will continue to be strongly biased in favour of opening offices in rural and semi-urban centres. Special attention is proposed to be paid to the covering of unbanked pockets in less excessible areas of different states. While selecting such centres for branch expansion, factors such as potential for mobilisation of different states. While selecting availability of banking facilities nearby, and other special features of the regions will be taken into account. The state governments will be consulted regarding the location of bank offices in rural and semi-urban areas, as well as the types of bank offices (commercial, rural or co-operative) suited for the centres. Priority will be given to RRBs for opening branches in districts where they have been set up or are proposed to be set up.

In keeping with the policy objectives, commercial banks continued to ensure an increasing flow of funds to priority sectors agriculture, small-scale industries, transport operators, professionals/self-employed persons and retail trade/small business. The priority sectors together accounted for advances amounting to Rs 7,999 crores outstanding as at the end of December 1980, against Rs 6,485 crores in December 1979. The share of these sectors stood at 33.7 per cent in December 1980 against 31.5 per cent in December 1979. In pursuance of the recommendations of the Working Group (constituted by the Reserve Bank) on Priority Sector Lending and the 20-Point Programme, the Reserve Bank has indicated the action to be initiated by banks for giving effect to the recommendations. An overall target of 40 per cent of total bank credit has been fixed in respect of priority sectors to be achieved by 1985. Within the priority sector advances, banks have been asked to give increasing attention to the credit needs of the under-privileged sections of the society as identified by the Working Group.

Deposits of commercial banks registered a significant expansion during the year 1980-81. Total deposits as on the last Friday of March 1981 stood at Rs 37,371 crores against Rs 31,759 crores a year before and Rs 4,646 crores in June 1969.

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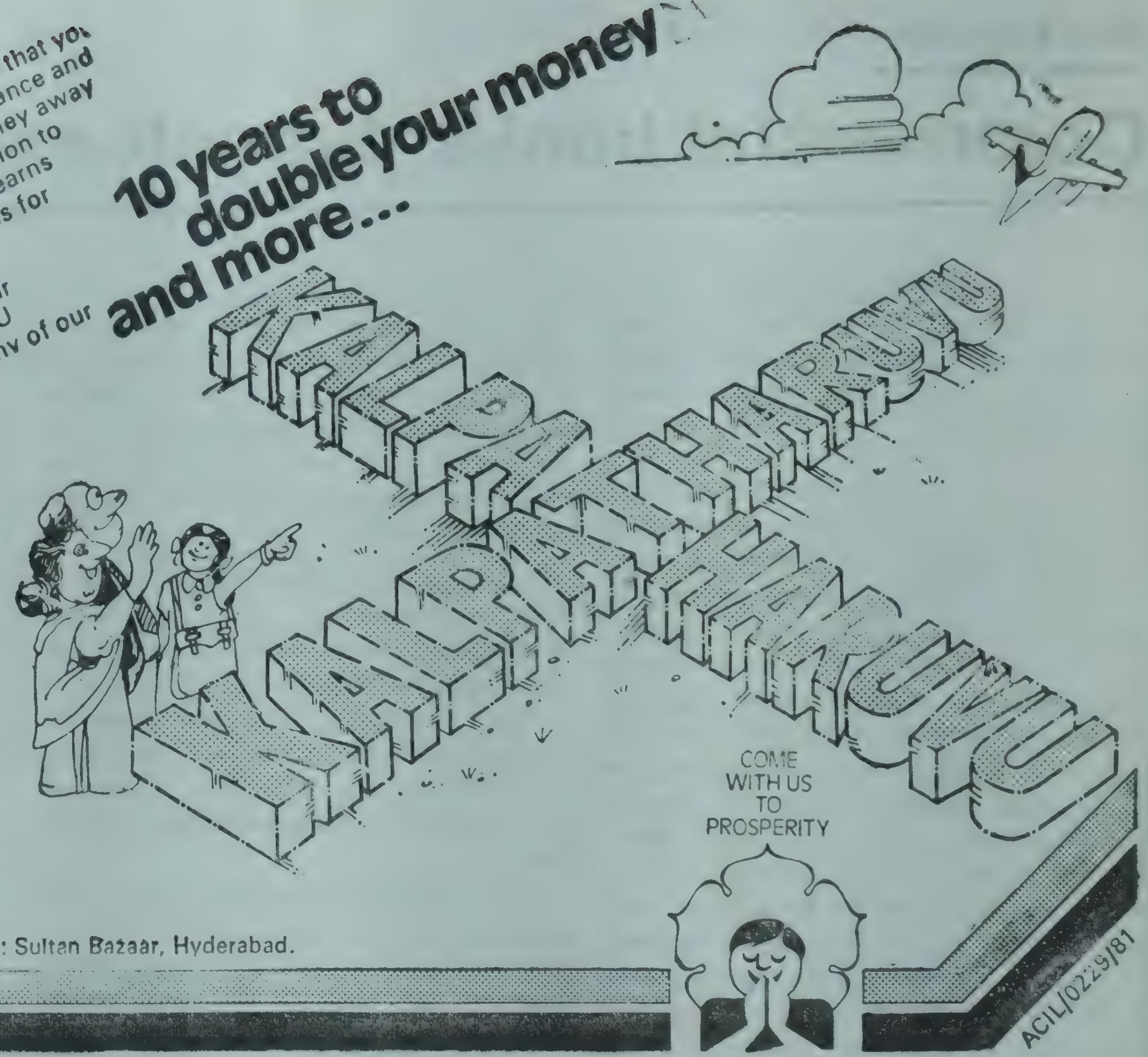

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Banking: A statistical profile

By COMMERCE RESEARCH BUREAU

Table 1: Centre-wise distribution of branches, deposits and credit of all commercial banks: June-end 1969 and April-end 1981

Population group	June-end 1969				April-end 1981			
	Branches	Deposits (Rs crores)	Credit (Rs crores)	Credit-deposit ratio (Per cent)	Branches	Deposits(a) (Rs crores	Credit(a) (Rs crores)	Credit-deposit ratio (Per cent)
Rural	1,832 (22.4)	145 (3.1)	54 (1.5)	37.2	17,230 (49.0)	3,538 (11.3)	2,016 (9.4)	57.0
Semi-urban	3,322 (40.1)	1,024 (22.0)	407 (11.3)	39.7	8,370 (23.8)	7,079 (22.5)	3,435 (16.0)	48.5
Urban	1,447 (17.5)	1,209 (25.9)	722 (20.0)	59.7	5,100 (14.5)	7,828 (24.9)	4,604 (21.4)	58.8
Metropolitan	1,661 (20.0)	2,287 (49.0)	2,426 (67.2)	106.1	4,492 (12.7)	12,993 (41.3)	11,421 (53.2)	87.9
Total	8,262 (100.0)	4,665 (100.0)	3,609 (100.0)	77.4	35,192 (100.0)	31,438 (100.0)	21,476 (100.0)	68.3

Notes: (a) Data relate to scheduled commercial banks as at the end of December 1979

Figures in brackets indicate percentages to total
Rural: Population up to 10,000
Semi-urban: Population over 10,000 and up to 1,00,000
Urban: Population over 1,00,000 and up to 10,00,000
Metropolitan: Population over 10,00,000

SOURCES: Reserve Bank of India, (i) **Report on Trend and Progress of Banking in India, 1979-80,** August 1980 and (ii) **Report on Currency and Finance, Vol. I. Economic Review, 1974-75 and 1979-80,** January, 1981 (iii) **Statistical Tables Relating to Banks in India, 1979,** May, 1981. and (iv) **Press Release dated July 20, 1981**

Table 2: Commercial bank branches in rural areas: 1969 to 1981

June-end	Total number of branches	Increase over the previous year		New branches opened in rural areas as per cent of total branches opened
		Total	In rural areas	
1969	8,262	—	—	—
1970	10,131	1,869	1,230	66
1971	12,013	1,882	1,217	65
1972	13,622	1,609	537	33
1973	15,362	1,740	744	43
1974	16,936	1,574	604	38
1975	18,730	1,794	641	36
1976	21,220	2,490	881	35
1977	24,802	3,582	1,845	52
1978	28,016	3,214	2,270	71
1979	30,202	2,186	1,531	70
1980	32,419	2,217	1,768	80
1981 (April)	35,192	2,773	2,129	77
Total	—	26,930	15,397	57

SOURCES: Reserve Bank of India, (i) **Report on Trend and Progress of Banking in India** (various issues), (ii) **Report on Currency and Finance, Vol. I. Economic Review** (various issues), and (iii) **Press Release dated July 20, 1981**

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Table 3: Statewise banking facilities

(Scheduled commercial banks)

State/Union Territory	Bank offices (a) (April-end 1981)		Bank deposits (December-end 1979)			Bank credit (December-end 1979)			Credit-deposit ratio (Per cent)
	Number	Per lakh of population	Rs crores	Per cent	Per capita (Rs)	Rs crores	Per cent	Per capita (Rs)	
States									
Andhra Pradesh	2,730	5.1	1,587	5.1	317	1,162	5.4	232	73.2
Assam	499	2.5	312	1.0	164	130	0.6	68	41.7
Bihar	2,333	3.3	1,308	4.2	198	540	2.5	82	41.3
Gujarat	2,332	6.9	2,180	6.9	681	1,191	5.5	372	54.6
Haryana	801	6.2	531	1.7	443	365	1.7	304	68.7
Himachal Pradesh	366	8.6	168	0.5	410	47	0.2	115	28.0
Jammu & Kashmir	444	7.4	294	0.9	507	97	0.5	167	67.0
Karnataka	2,776	7.5	1,612	5.1	467	1,245	5.8	361	77.2
Kerala	2,319	9.1	1,214	3.9	482	775	3.6	308	63.8
Madhya Pradesh	2,118	4.1	977	3.1	191	508	2.4	99	52.0
Maharashtra	3,598	5.7	6,094	9.4	1,031	4,680	21.8	792	76.8
Manipur	37	2.6	13	—	93	5	—	36	38.5
Meghalaya	59	4.4	47	0.2	362	7	—	54	14.9
Nagaland	39	5.0	16	0.1	229	4	—	57	25.0
Orissa	939	3.6	335	1.1	128	188	0.9	72	56.1
Punjab..	1,577	9.5	1,587	5.1	1,017	671	3.1	430	42.3
Rajasthan	1,609	5.0	684	2.2	213	465	2.2	145	68.0
Sikkim	3(b)	1.0	5	—	250	—	—	—	—
Tamil Nadu	2,987	6.2	2,265	7.2	489	1,924	9.0	416	84.9
Tripura	84	4.1	27	0.1	135	15	0.1	75	55.6
Uttar Pradesh..	4,044	3.6	2,887	9.2	281	1,294	6.0	126	44.8
West Bengal	2,209	4.1	3,655	11.6	677	2,281	10.6	422	62.4
Union Territories									
Andaman & Nicobar ..	12	6.4	8	—	400	2	—	100	25.0
Arunachal Pradesh	20	3.2	7	—	117	1	—	17	14.3
Chandigarh	80	17.8	261	0.8	5,220	504	2.4	10,080	193.1
Dadra & Nagar Haveli ..	6	5.8	1	—	100	1	—	100	100.0
Delhi	866	14.0	3,047	9.7	5,253	3,232	15.1	5,572	182.9
Goa, Daman & Diu	241	22.3	266	0.8	2,418	113	0.5	1,027	42.5
Lakshadweep	5	12.4	1	—	250	—	—	—	—
Mizoram	12	2.5	3	—	75	—	—	—	—
Pondicherry	50	8.3	46	0.1	767	29	0.1	483	63.0
All-India	35,195(c)	5.1	31,438	100.0	483	21,476	100.0	330	68.3

Notes : (—) = Nil or negligible (....) = Not available
(a) Data relate to all commercial banks (b) Data as of June 1981 (c) Inclusive of bank offices as of June 1981 in Sikkim.

SOURCES: 1. Reserve Bank of India (i) **Report on Trend and Progress of Banking in India, 1979-80**, August 1980 and (ii) **Statistical Table Relating to Banks in India, 1979**. May 1981 and (iii) **Press Release dated July 20, 1981**
2. Commerce Research Bureau's Data System

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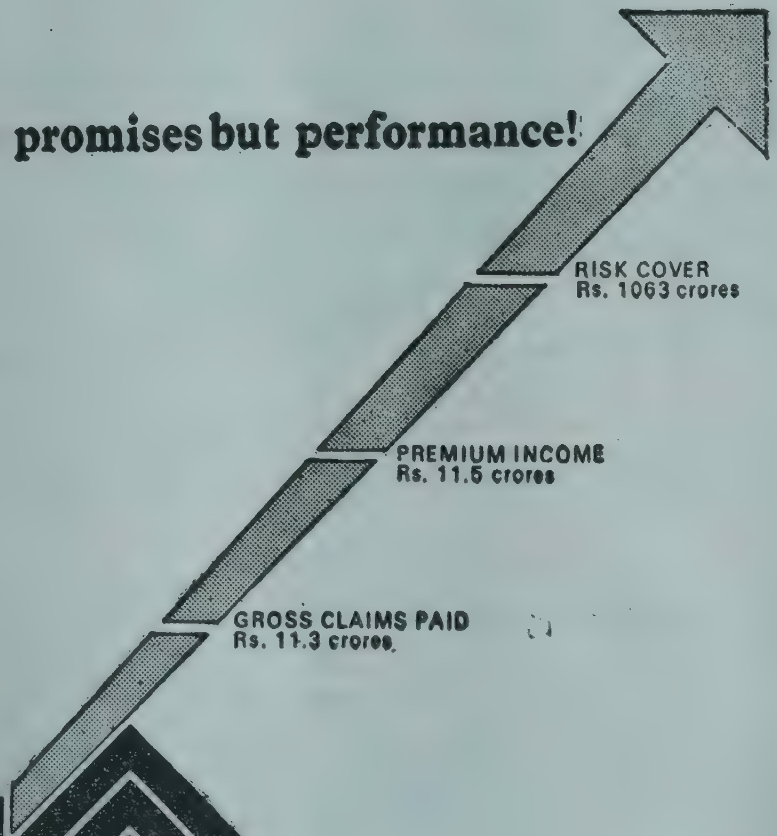

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Table 4 : Growth of deposits and credit of all scheduled commercial banks 1950-51 to 1980-81

On last Friday of March	Aggregate deposits		Bank credit	
	Rs crores	Percentage variation	Rs crores	Percentage variation
1950-51	881		547	
1955-56	1,043	10.6	761	22.2
1956-57	1,175	12.7	900	18.3
1957-58	1,451	23.5	963	7.0
1958-59	1,635	12.7	1,014	5.3
1959-60	1,902	16.3	1,128	11.2
1960-61	1,746	—8.2	1·320	17.0
1961-62	1,922	10.1	1,408	6.7
1962-63	2,042	6.2	1.588	12.8
1963-64	2,285	11.9	1,816	14.4
1964-65	2,583	13.0	2,034	12.0
1965-66	2,950	14.2	2288	12.5
1966-67	3,426	16.1	2,694	17.7
1967-68	3,856	12.6	3,033	12.6
1968-69	4,338	12.5	3,396	12.0
1969-70	5,028	15.9	3,971	16.9
1970-71	5,906	17.5	4,684	18.0
1971-72	7,106	20.3	5,263	12.4
1972-73	8,643	21.6	6,115	16.2
1973-74	10,139	17.3	7,399	21.0
1974-75	11,827	16.6	8,762	18.4
1975-76	14,155	19.7	10,877	24.1
1976-77	17,566	24.1	13,173	21.1
1977-78	22,211	26.4	15,246*	15.7
1978-79	27,016	21.6	18,285*	19.9
1979-80	31,759	17.6	21,537*	17.8
1980-81	37,371	17.7	25,090	16.5
Annual rate of increase per cent between :				
1950-51 and 1965-66		8.4		10.0
1965-66 and 1980-81		18.4		17.3
1950-51 and 1980-81		13.3		13.5

* inclusive of all participation certificates.

Notes : (a) Estimated by the Commerce Research Bureau

SOURCES: Reserve Bank of India (i) **Report on Currency and Finance**, various issues (ii) **Reserve Bank of India Bulletin**, various issues and (iii) **Reserve Bank of India Bulletin Weekly Statistical Supplement** dated **April 6, 1981.**

Table 5 : Sectoral deployment of gross bank credit
(Including bills rediscounted with the RBI)

	June 1977		June 1978		June 1979		June 1980		December 1980	
	Rs crores	Per cent	Rs crores	Per cent	Rs crores	Per cent	Rs crores	Per cent	Rs crores	Per cent
I. Public food procurement credit	2,536	18.6	2,525	15.8	2,996	15.5	2,414	11.1	2,032	8.6
II. (a) Priority sectors	3,486	25.6	4,334	27.2	5,677	29.3	6,974	32.1	7,999	33.8
(i) Agriculture	1,381	10.2	1,726	10.8	2,288	11.8	2,911	13.4	3,416	14.4
(ii) Small-scale industries	1,460	10.7	1,756	11.0	2,252	11.6	2,711	12.5	3,021	12.8
(iii) Other priority sectors	645	4.7	852	5.3	1,137	5.9	1,352	6.2	1,562	6.6
(b) Industry (medium and large)	5,372	39.5	6,249	39.2	7,291	37.7	8,310	38.2	9,301	39.3
(c) Wholesale trade (other than food procurement)	1,053	7.8	1,424	8.9	1,612	8.3	1,863	8.6	1,873	7.9
(d) Other sectors	1,160	8.5	1,428	8.9	1,767	9.1	2,188	10.1	2,466	10.4
III. Non-food gross bank credit (a+b+c+d)	11,071	81.4	13,435	84.2	16,347	84.5	19,335	88.9	21,639	91.4
Export credit (included under item III)	1,229	9.0	1,142	7.2	1,449	7.5	1,628	7.5	1,664	7.0
IV. Gross bank credit(I+III)	13,607	100.0	15,960	100.0	19,343	100.0	21,749	100.0	23,671	100.0

Note: Data relate to major banks which account for about 95 per cent of gross bank credit. These data besides taking into account the bills rediscounted with the RBI, also include bills rediscounted with the IDBI and other approved institutions and participation certificates.

SOURCE: Reserve Bank of India (i) **Report on Trends and Progress of Banking in India 1978-79**, September 1979 and (ii) **Report on Currency and Finance, Vol,. I, Economic Review 1979-80**, January 31, 1981. and (iii) **Press Release dated July 20, 1981.**

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Table 6 : Sectorwise distribution of outstanding credit : June-end 1979

(All scheduled commercial banks)

	Accounts		Amount outstanding	
	Number	Per cent	Rs crores	Per cent
I. Agriculture (a and b)	**73,33,791**	**47.7**	**2,521**	**13.2**
(a) Direct finance	69,64,689	45.3	1,946	10.2
(b) Indirect finance	3,69,102	2.4	575	3.0
II. Industry (A to E)	**6,65,947**	**4.3**	**8,963**	**46.8**
A. Mining and quarrying	3,112	—	149	0.8
B. Manufacturing (c to n)	2,82,391	1.8	9,012	47.0
(c) Food manufacturing and other processing (i+ii+iii+iv) ..	32,803	0.2	978	5.1
(i) Rice mills, flour and dal mills	13,563	0.1	139	0.7
(ii) Sugar	1,235	—	363	1.9
(iii) Edible oils and vanaspati ..	7,116	—	174	0.9
(iv) Others	10,889	0.1	302	1.6
(d) Beverage and Tobacco	3,725	—	154	0.8
(e) Textiles	48,464	0.3	1,711	8.9
(f) Paper, paper products and printing	16,718	0.1	305	1.6
(g) Leather and leather products ..	4,443	—	160	0.8
(h) Rubber and rubber products ..	5,509	—	194	1.0
(i) Chemicals and chemical products	36,746	0.2	1,057	5.5
(j) Basic minerals	1,246	—	88	0.4
(k) Cement	2,560	—	74	0.4
(l) Basic metal and metal products ..	38,780	0.3	1,012	5.3
(m) Engineering	46,672	0.3	1,846	9.6
(n) Vehicles, vehicle parts and transport equipment	11,922	0.1	455	2.4
C. Electricity generation, transmission and distribution	573	—	76	0.4
D. Construction	11,438	0.1	144	0.8
E. Others	4,01,236	2.6	561	2.9
III. Transport operators	**3,23,380**	**2.1**	**820**	**4.3**
IV. Personal and professional services ..	**10,07,482**	**6.5**	**391**	**2.0**
V. Trade	**13,64,946**	**8.9**	**4,864**	**25.4**
VI. Personal loans including consumer durables	**20,48,767**	**13.3**	**605**	**3.2**
VII. Miscellaneous	**26,39,095**	**17.2**	**999**	**5.2**
Total (I+II+III+IV+V+VI+VII)	1,53,83,408	100.0	19,163	100.0
Of which Small-scale Industry	5,34,318	3.5	2,277	11.9

Note : (—) = Negligible

SOURCE : Reserve Bank of India, **Statistical Tables Relating to Banks in India, 1979**, May 1981

Table 7 : Scheduled commercial banks' advances to priority sectors : 1969 to 1979

(Rs crores)

Advances to	Outstanding advances as on last Friday of							
	June 1969	December 1974	December 1975	December 1976	December 1977	December 1978	June 1979	Increase between June 1969 and June 1979
A. Agriculture (i+ii)	188 (37.2)	781 (36.8)	1,024 (39.2)	1,335 (39.3)	1,651 (39.9)	2,236 (41.4)	2,459 (41.6)	2,271 (42.0)
(i) Direct finance	54 (10.7)	539 (25.4)	725 (27.8)	1,003 (29.5)	1,260 (30.5)	1,665 (30.8)	1,825 (30.9)	1,771 (32.8)
(ii) Indirect finance	134 (26.5)	242 (11.4)	299 (11.4)	332 (9.8)	391 (9.4)	571 (10.6)	634 (10.7)	500 (9.2)
B. Small-scale industries	286 (56.6)	1,017 (47.9)	1,147 (44.0)	1,421 (41.9)	1,706 (41.2)	2,156 (39.9)	2,333 (39.5)	2,047 (37.9)
C. Other priority sectors(a)	31 (6.2)	323 (15.2)	438 (16.8)	639 (18.8)	780 (18.9)	1,013 (18.7)	1,116 (18.9)	1,085 (20.1)
I. Total advance to to priority sectors (A + B + C)	505 (100.0)	2,121 (100.0)	2,609 (100.0)	3,395 (100.0)	4,137 (100.0)	5,405 (100.0)	5,908 (100.0)	5,403 (100.0)
II. Total advances to all sectors	3,599	7,784	8,938	13,212	14,850	17,808	19,116	15,517
III. I as per cent of II	14	27	29	26	28	30	31	35

Notes : (a) Include road and water transport operators, retail trade and small business, professional and self-employed persons, education and industrial estates.

Figures in brackets indicate percentage of respective sector to total priority sector advances.

SOURCE : Reserve Bank of India **Report on Currency and Finance, Vol. I, Economic Review** (various issues)

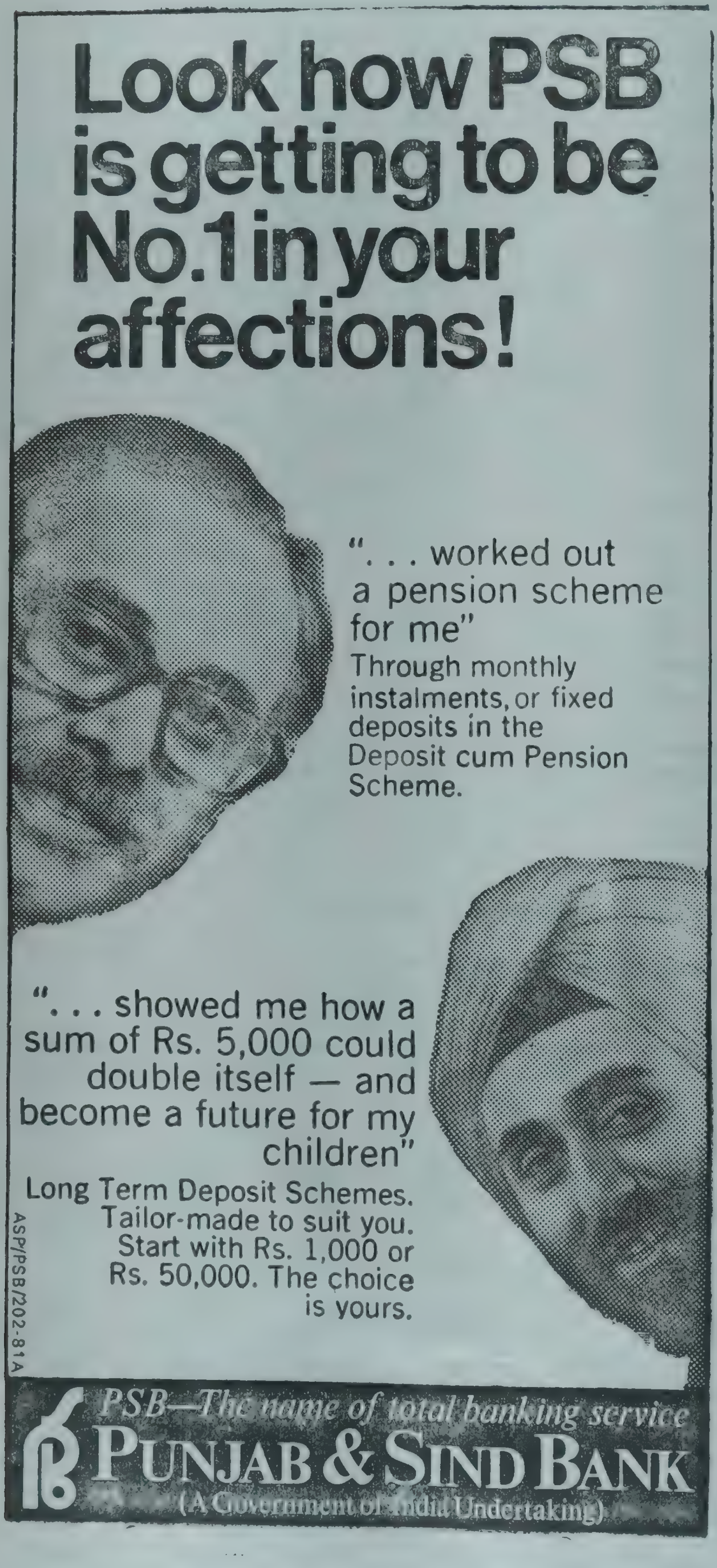

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Table 8 : Public sector banks' advances to priority sectors : 1969 to 1979(a)

(Rs crores)

Advances to	Outstanding advances as on last Friday of										Increase between June 1969 and Dec. 1979
	June 1969	June 1971	June 1973	June 1974	June 1975	June 1976	June 1977	June 1978	June 1979	December 1979	
A. Agriculture (i+ii)	162 (36.7)	340 (37.5)	469 (36.3)	586 (34.7)	768 (38.4)	1,004 (39.7)	1,275 (40.5)	1,659 (41.5)	2,221 (42.4)	2,562 (43.1)	2,400 (43.6)
(i) Direct finance	40 (9.1)	206 (22.7)	298 (23.1)	392 23.2)	511 (25.6)	726 (28.7)	951 (30.2)	1,235 (30.9)	1,678 (32.0)	2,005 (33.7)	2,965 (35.7)
(ii) Indirect finance	122 (27.6)	134 (14.8)	171 (13.2)	194 (11.5)	257 (12.8)	278 (11.0)	324 (10.3)	424 (10.6)	543 (10.4)	557 (9.4)	435 (7.9)
B. Small-scale industries	251 (56.9)	442 (48.7)	642 (49.7)	868 (51.4)	943 (47.2)	1,099 (43.5)	1,315 (41.8)	1,644 (41.1)	2,061 (39.4)	2,323 (39.1)	2,072 (37.6)
C. Other priority sectors(b) ..	28 (6.4)	125 (13.8)	181 (14.0)	234 (13.9)	288 (14.4)	425 (16.8)	556 (17.7)	698 (17.4)	951 (18.2)	1,062 (17.8)	1,034 (18.8)
I. Total advances to priority sectors (A+B+C)	441 (100.0)	907 (100.0)	1,292 (100.0)	1,688 (100.0)	1,999 (100.0)	2,528 (100.0)	3,146 (100.0)	4,001 (100.0)	5,233 (100.0)	5,947 (100.0)	5,506 (100.0)
II. Total advances to all sectors ..	3,017	4,080	5,430	6,692	7,654	9,928	11,643	13,364	16,220	17,287	14,270
III. I as per cent of II	15	22	24	25	26	25	27	30	32	34	39

Notes : (a) Exclude advances by six banks nationalised on April 15, 1980
(b) Include road and water transport operators, retail trade and small business, professional and self-employed persons, education and industrial estates

Figures in brackets indicate percentage share of individual sectors to total priority sector advances of public sector banks.

SOURCES : 1. Government of India, **Economic Survey,** various issues.
2. Reserve Bank of India, **Report on Currency and Finance, Vol. I, Economic Review,** 1979-80, January 1981.

Table 9 : Advances by public sector banks* under the scheme of differential rate of interest : 1972 to 1979

As at the end of December	Borrowal accounts (Lakhs)	Amount outstanding (Rs crores)	Percentage of DRT advances to total advances of the previous year
1972	0.26	0.87	0.02
1973	2.30	10.06	0.22
1974	3.13	13.35	0.23
1975	4.65	20.99	0.31
1976	10.05	47.24	0.56
1977	13.92	67.99	0.61
1978	16.20	90.00	0.66
1979	20.76	139.80	0.85

* Exclude data for six banks nationalised on April 15, 1980.

SOURCE : Reserve Bank of India, **Statistical Tables Relating to Banks in India** (various issues).

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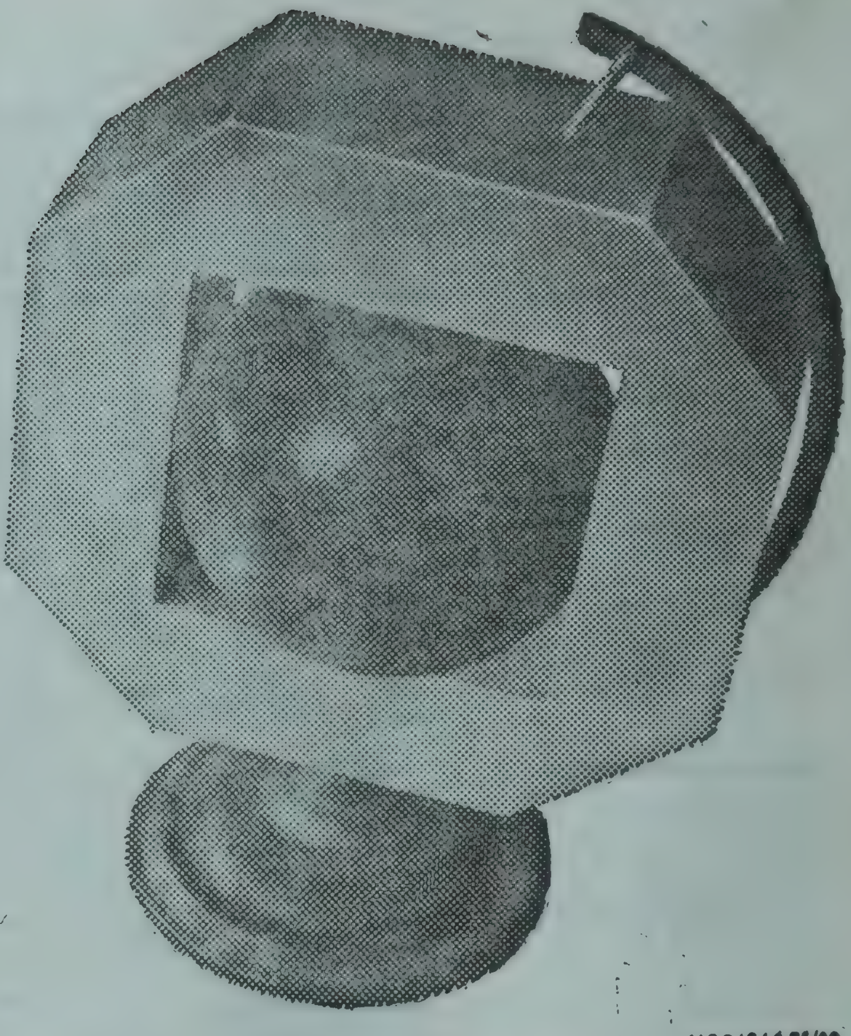

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Table 10 : Bankwise advances by public sector banks under the scheme of differential rates of interest : 1972 and 1979

(As on December 31)

(Amount in Rs lakhs)

Name of the bank	1972		1979	
	Number of accounts	Balance out standing	Number of accounts	Balance out-standing
State Bank group	**10,678**	**32.05** (0.02)	**10,10,107**	**6,0632** (1.02)
State Bank of India	6,441	20.76	8,37,053	4,990
State Bank of Bikaner and Jaipur	2,053	3.79	21,296	179
State Bank of Hyderabad	658	2.07	39,337	240
State Bank of Indore	277	1.05	9,312	57
State Bank of Mysore	145	0.49	30,216	148
State Bank of Patiala	198	0.78	15,805	179
State Bank of Saurashtra	306	1.33	12,780	96
State Bank of Travancore	600	1.78	44,308	173
Nationalised banks	**15,228**	**56.37** (0.02)	**10,65,741**	**7,918** (0.75)
Allahabad Bank	153	0.94	19,829	161
Bank of Baroda	60	0.20	1,54,087	1,219
Bank of India	907	4.77	1,19,224	673
Bank of Maharashtra	313	0.78	24,640	198
Canara Bank	3,569	10.10	99,724	427
Central Bank of India	1,042	4.04	1,45,513	1,314
Dena Bank	765	2.45	32,767	279
Indian Bank	436	1.18	38,684	238
Indian Overseas Bank	131	0.76	64,204	417
Punjab National Bank	700	3.51	89,981	1,231
Syndicate Bank	1,020	4.43	80,880	413
Union Bank of India	4,984	18.72	92,387	684
United Bank of India	378	1.41	42,302	206
United Commercial Bank	770	3.08	61,519	458
Total public sector banks*	25,906	88.42 (0.02)	20,75,848	13,980 (0.85)

Notes : Figures in brackets indicate percentage of DRI advances to total advances of the respective group.
* Exclude data on six banks nationalised on April 15, 1980

SOURCES: Reserve Bank of India, (i) **Statistical Tables Relating to Banks in India** (various issues), (ii) **Report on Trend and Progress of Banking in India** (varios issues) and (iii) **Report on Currency and Finance, Vol. I, Economic Review, 1979-80, January 1981.**

Table 11 : Performance of lead banks : December-end 1979

Bank	Number of districts allotted under lead bank scheme	Number of offices opened		
		In lead districts	Outside ead dis--tricts	Total (2+3)
	1	2	3	4
I. **Public sector banks** (i+ii)	**398**	**5,330**	**10,911**	**16,241**
(i) State Bank of India Group(a)	111	1,269	3,674	4,943
(ii) Nationalised Indian banks :	**287**	**4,061**	**7,237**	**11,298**
Allahabad Bank	9	172	539	711
Andhra Bank	5	129	271	400
Bank of Baroda	30	493	500	993
Bank of India	32	448	521	969
Bank of Maharashtra	5	165	312	477
Canara Bank	18	305	528	833
Central Bank of India	46	373	651	1,024
Dena Bank	10	183	350	533
Indian Bank	9	170	367	537
Indian Overseas Bank	7	106	432	538
Punjab National Bank	41	400	527	927
Punjab & Sind Bank	1	34	435	469
Syndicate Bank	19	274	394	668
Union Bank of India	8	148	697	845
United Bank of India	23	318	303	621
United Commercial Bank	24	343	410	752
Private sector bank	—	**17**	**108**	**125**
Bank of Rajasthan (a)	—	17	108	125
Total (I+II)	398	5,347	11,019	16,306

Notes : (a) The district jointly allotted with another bank.
(—) = Nil

SOURCE: Reserve Bank of India, **Statistical Tables Relating to Banks in India, 1979 May 1981**

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Table 12 : Performance of regional rural banks

State	Number (June-end 1980)		Number of accounts (June-end 1977)	Rs lakhs	
	Banks	Branches		Deposits (June-end 1977)	Loans advanced (As on August 26, 1977)
Andhra Pradesh	4	265	71,054	269.55	567.95
Assam	1	42	5,785	11.73	12.15
Bihar	14	448	22,441	94.89	109.16
Gujarat	2	39	..	..	..
Haryana	2	76	30,720	64.00	138.51
Himachal Pradesh ..	1	27	5,065	9.74	6.02
Jammu & Kashmir ..	2	54	5,427	30.24	16.11
Karnataka	4	211	53,413	103.23	404.19
Kerala	2	150	22,911	40.56	117.32
Madhya Pradesh	9	203	26,010	64.34	154.71
Maharashtra	1	70	6,372	20.56	47.23
Orissa	6	186	30,778	104.65	187.20
Rajasthan	4	208	23,310	115.40	187.64
Tamil Nadu	1	75	2,082	14.11	28.19
Tripura	1	30	3,251	16.43	22.74
Uttar Pradesh	15	447	1,01,709	518.94	503.71
West Bengal	4	147	15,315	87.59	241.63
All-States	73(a)	2,678	4,25,643	1,565.96(b)	2,744.46(b)

Notes: (a) By the end of March 1981 the number of banks increased to 100 covering 163 districts. By the end of the Sixth Plan period (1984-85-) another 70 RRBs would be established.

(b) At the end of June 1980 the deposits amounted to Rs 162.23 crores and advances Rs 189.22 crores.

(..) = Not available.

SOURCES:
1. Reserve Bank of India(i) **Report on Trend and Progress of Banking in India, 1979-80**, August 1980 and (ii) **Report on Currency and Finance, 1979-80, Vol. I, Economic Review**, January 1981
2. Reserve Bank of India, **Report of the Review Committee on Regional Rural Banks**, 1978
3. Reply to **Unstarred Question No. 69** in the **Rajya Sabha** on November 15, 1977

Table 13: Working results of scheduled commercial banks: 1978 and 1979

(Rs crores)

	State Bank group		14 Nationalised banks		All public sector banks(a)		Other Indian scheduled commercial banks*(b)		Foreign banks	
	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979
I. Total earnings	801.55	1,008.17	1,442.56	1,790.09	2,244.11	2,798.26	221.12	281.54	138.13	158.98
Of which : .. .. Interest and discount	668.30 (83.4)	841.89 (83.5)	1,299.68 (90.1)	1,626.79 (90.9)	1,967.98 (87.7)	2,468.68 (88.2)	196.25 (88.8)	248.68 (88.3)	107.51 (77.8)	124.28 (78.2)
II. Total expenditure	791.88	997.03	1,426.70	1,771.05	2,218.58	2,768.08	218.60	277.41	132.35	151.16
Of which : .. .. Interest paid on deposits, borrowings, etc.	490.88 (62.0)	622.41 (62.4)	938.25 (65.8)	1,177.07 (66.5)	1,429.13 (64.4)	1,799.48 (65.0)	126.94 (58.1)	161.82 (58.3)	61.21 (46.2)	70.85 (46.9)
Salaries, allowances, provident fund and bonus/ex-gratia payment to staff	226.43 (28.6)	285.68 (28.7)	351.10 (24.6)	432.84 (24.4)	577.53 (26.0)	718.52 (26.0)	60.78 (27.8)	77.21 (27.8)	28.62 (21.6)	32.73 (21.7)
III. Profit after provision for taxation and bonus/ex-gratia payment to staff ..	9.67	11.14	15.86	19.04	25.53	30.18	2.52	4.13	5.78	7.82

Notes : Figures in brackets indicate percentages to total earnings/expenditure

(a) Excludes six banks nationalised on April 15, 1980
(b) Includes six banks nationalised on April 15, 1980
* Figures relate to 32 comparable Indian commercial banks in the private sector with deposits of Rs 10 crores and over

SOURCE: Reserve Bank of India, **Report on Trend and Progress of Banking in India, 1979-80** August 1980

Table 14 : Indian banks abroad : June 1981

Bank	Number of branches abroad *	Location/Country
Bank of Baroda (a)	58	Nassau (BAHAMAS), Manama (BAHRAIN), Narayanganj (BANGLADESH) **, Brussels (BELGIUM), Ba, Ba (mobile), Labasa, Lautoka, Nadi, Raki Raki, Sigatoka, Sigatoka (mobile) Suva, Suva (mobile) (FIJI ISLANDS), Georgetown, New Amsterdam (GUYANA), Kisumu, Kisumu (mobile), Mombasa—Makadara Road and Digo Road, Nairobi—City Square and Coryndon Street, Thika (KENYA), Curepipe, Port Louis, Port Louis (mobile), Quatre Bornes, Rose Hill, Vacoas (MAURITIUS), Mutrah-Muscat, Ruwi, Salalah (OMAN), Victoria (SEYCHELLES), Abu Dhabi — Sheikh Khalifa Street and Sheikh Zayed Road, Deira, Dubai, Fujiarah, Ras-Al-Khaimah, Sharjah, Umm-Al-Quwain (UNITED ARAB EMIRATES), Birmingham, Bolton, Bradford, Brent, Conventry, Croydon, Handsworth, Ilford, Kilburn, London, Luton, Manchester, Slough, Southall, Streatham, White Chapel (UNITED KINGDOM), New York (UNITED STATES)
Bank of India	23	Jersey (CHANNEL ISLANDS), Paris (FRANCE), Hong Kong, Kowloon (HONG KONG) Tokyo, Osaka (JAPAN), Nairobi, Mombasa (KENYA), Karachi (PAKISTAN)**, Singapore (SINGAPORE), Birmingham, Finchley, Glasgow, Huddersfield, Leeds, Leicester, London, Manchester, Melton Road, Preston, Stratford Road, Wembley (UNITED KINGDOM), New York (UNITED STATES)
Bharat Overseas Bank	1	Bangkok (THAILAND)
Central Bank of India	3	London, East Ham, Birmingham (UNITED KINGDOM)
Indian Bank (a)	3	Singapore (SINGAPORE), Colombo—Main, Colombo Free Trade Zone (SRI LANKA)
Indian Overseas Bank	11	Hong Kong—Causeway Bay, Duddel Street, Kwai Chung, Kowloon, Kwun Tong, Mongkok, Tsim sha Tsui (HONG KONG), Seoul (KOREA), Singapore (SINGAPORE), Colombo—Colombo (main), Katunayake Investment Promotion Zone (SRI LANKA)
Punjab and Sind Bank	1	Southall (UNITED KINGDOM)
Punjab National Bank	3	London—Main, Wall, Wolverhampton (UNITED KINGDOM)
State Bank of India	21	Bahrain (BAHRAIN), Nassau (BAHAMAS), Dacca (BANGLADESH), Cayman Islands (CAYMAN ISLANDS), Paris (FRANCE), Hong Kong (HONG KONG), Jakarta (INDONESIA), Tokyo (JAPAN), Male (MALDIVES), Panama (PANAMA), Singapore (SINGAPORE), Colombo (Foreign Currency Banking Unit), Colombo (SRI LANKA), Golders Green, London, Nottingham, Southall, West End (UNITED KINGDOM), Chicago Flushing, New York (UNITED STATES), Frankfurt (WEST GERMANY)
Syndicate Bank	1	London (UNITED KINGDOM)
Union Bank of India (a)	1	London (UNITED KINGDOM)
United Commercial Bank	9	Hong Kong, Kowloon, Mongkok, North Point (HONG KONG), Singapore—Raffles Plase, Serangoon Road and Tanjong Pagar (SINGAPORE), Leicester, London (UNITED KINGDOM)
Total	135	

Notes: * Excludes representative offices
** Non-operational branch

(a) There is a deposit taking company called IBU International Finance Ltd at Hong Kong, jointly promoted by Indian Bank, Bank of Baroda and Union Bank of India.

Table 14 : Indian banks abroad : June 1981 (Contd.)

Country-wise summary of branches abroad

Country	Branches	Country	Branches
Bahamas	2	Maldives	1
Bahrain	2	Oman	3
Bangladesh	2	Mauritius	6
Belgium	1	Pakistan	1
Cayman Islands	1	Panama	1
Channel Islands	1	Seychelles	1
Fiji Islands	10	Singapore	7
France	2	Sri Lanka	6
Guyana	2	Thailand	1
Hong Kong	14	United Arab Emirates	8
Japan	3	United Kingdom	44
Kenya	9	United States	5
Korea	1	West Germany	1
Total			135

SOURCES:
1. Banks' Annual Reports
2. Reserve Bank of India, **Annual Report 1979-80**, August 1980 and **Report on Trend and Progress of Banking in India 1979-80**, August 1980
3. **Commerce Research Bureau's Data System**

Table 15 : Business of Indian banks abroad(a) : 1969 to 1979

Year	Number of banks	Number of offices	Deposits (Rs crores) Demand	Time	Total	Bank credit(b) (Rs crores)	Credit-deposit ratio (Per cent)
1969	...	56	67.73	89.79	157.52	52.64	57.8
1970	7	59	73.44	99.40	172.84	97.26	56.3
1971	7	62	85.90	108.99	194.89	101.63	52.1
1972	7	69(c)	135.17	142.32	277.49	163.78	59.0
1973	7	55(c)	119.38	154.68	274.06	182.87	66.7
1974	8	63(c)	189.68	217.17	406.85	238.62	58.7
1975	8	77(c)	239.10	370.41	609.51	368.83	60.5
1976	10	90(c)	238.81	625.93	864.74	494.02	57.1
1977	11	105(c)	313.31	912.87	1,226.18	850.31	69.3
1978	11	121(d)	378.34	1,096.12	1,474.46	1,067.37	72.4
1979	11	127(c)	401.48	1,170.80	1,572.28	1,425.24	90.6

Notes : (a) Exclude data on offices of Indian banks in Pakistan and Bangladesh as also of the subsidiaries of Bank of India in Nigeria and Bank of Baroda.
(b) Includes loans and advances and bills purchased and discounted.
(c) Includes five mobile offices in Kenya, Fiji Islands and Mauritius.
(d) Includes six mobile offices in Kenya, Fiji Islands, Mauritius and USA.
(...) = Not available.

SOURCE : Reserve Bank of India, **Statistical Tables Relating to Banks in India** (various issues).

Table 16 : Foreign banks in India : 1981

Name of the bank	Number of branches
1. Algemene Bank Nederland N V (General Bank of Netherlands)	3
2. American Express International Banking Corporation, USA	3
3. Bank of America National Trust and Savings Association, USA	4
4. Bank of Oman, Dubai	1
5. Emirates Commercial Bank, Abu Bubai	1
6. European Asian Bank, Hamburg	1
7. Bank of Tokyo, Japan	3
8. Banque Nationale de Paris, France	5
9. British Bank of the Middle East, Hong Kong	1
10. Chartered Bank, UK	24
11. Citibank, N A., USA	6
12. Grindlays Bank, UK	56
13. Indo-Suez Bank (Banque de L'Indochine et de Suez), France	1
14. Mercantile Bank, Hong Kong	20
15. Mitsui Bank, Japan	1
16. Sonali Bank, Bangladesh	1
Total	131

SOURCES : 1. Reserve Bank of India, **Statistical Tables Relating to Banks in India 1979,** May 1981.
2. **Commerce Research Bureau's Data System.**

Table 17 : Number of offices, deposits and credit of foreign banks in India(a) : 1969 and 1979
(Business in India)

Name of the bank	1969 Number of offices	1969 Rs crores Deposits	1969 Rs crores Bank credit(b)	1979 Number of offices	1979 Rs crores Deposits	1979 Rs crores Bank credit(b)
1. Algemene Bank Nederland N.V.	3	5.00	5.16	3	18.49	16.01
2. American Express International Banking Corporation	3	33.86	23.74	3	92.81	74.28
3. Bank of America National Trust and Savings Association	3	33.93	24.76	4	91.48	67.82
4. Bank of Tokyo	3	7.51	7.53	3	33.57	16.43
5. Banque Nationale de Paris	5	7.04	5.01	5	31.68	21.30
6. British Bank of the Middle East	1	5.75	4.37	1	31.88	12.77
7. Chartered Bank	20	57.51	44.00	24	162.56	121.72
8. Citibank N.A.	8	65.00	53.51	6	96.27	88.44
9. Grindlays Bank	56	219.82	178.84	56	436.30	347.62
10. Mercantile Bank	19	36.07	31.43	20	135.45	94.01
11. Mitsui Bank	1	2.11	1.96	1	7.78	5.60
12. Sonali Bank	...	...	...	1	0.71	0.80
Total for 12 banks	122	473.60	380.31	127	1,138.98	866.80

Notes : (a) Exclude four banks which opened their offices in India in 1980 and 1981
(b) Includes loans and advances and bills discounted and purchased
(...) = Not available

SOURCE : Reserve Bank of India, **Statistical Tables Relating to Banks in India, 1969 and 1979.**

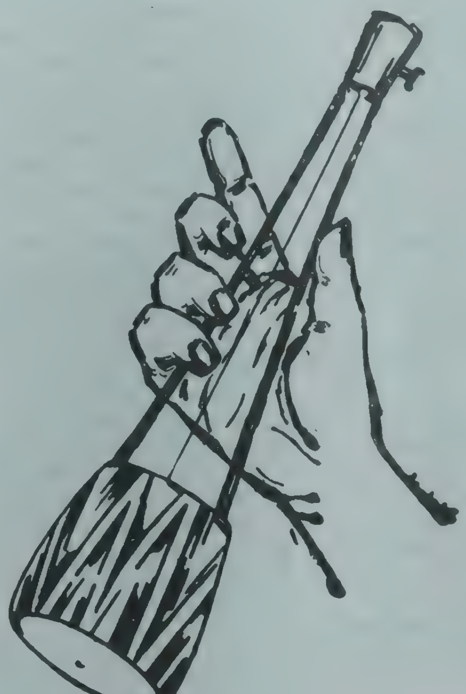

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Table 18: Central co-operative banks: June-end 1978

State	Number of banks	Membership		Rs lakhs		
		Co-operative societies	Individuals and others	Deposits	Loans outstanding	Overdues
Andhra Pradesh	26	19,916	2,932	5,519	16,338	5,950
Assam	1(a)	515	285	30	68	42
Bihar	28	30,556	2,553	951	5,697	4,645
Gujarat	18	18,291	9,788	23,941	30,542	10,095
Haryana	12	711	8	3,524	8,001	2,639
Himachal Pradesh	2	2,314	216	1,307	282	86
Jammu and Kashmir	3	2,085	352	536	810	271
Karnataka	19	12,516	1,231	7,497	15,861	5,366
Kerala	11	3,979	11	6,962	8,664	1,277
Madhya Pradesh	44	11,022	12,241	7,511	11,831	5,816
Maharashtra	26	33,589	23,201	31,321	38,044	14,152
Orissa	17	5,070	41	2,143	5,033	1,175
Punjab	17	21,505	12	10,183	7,331	4,045
Rajasthan	25	10,054	25	4,395	8,898	4,140
Tamil Nadu	16	11.605	12,122	12.689	29,172	4,494
Uttar Pradesh	56	15,714	3,087	14,518	18,222	8.604
West Bengal	17	9,690	1,443	3,634	6·691	2,601
Total	338	2,16,132	69,548	1,37,661	2,11,487	75,398

Note: (a) Data relating to six central co-operative banks which were under the process of amalgamation and later merged with the Assam Co-operative Apex Bank Ltd., not available.

SOURCE: Reserve Bank of India, **Statistical Statements Relating to the Co-operative Movement in India, 1977-78, Part I, Credit Societies,** December 1979.

Table 19: State co-operative banks: June-end 1978

State/Union Territory	Number of office	Membership		Rs lakhs		
		Co-operative societies	Individuals and others	Deposits	Loans outstanding	Overdues
States						
Andhra Pradesh	11	26	1	5,396	11·195	776
Assam	23	1,467	1,874	3,257	2,118	1,067
Bihar	10	115	26	2,920	4,248	1,959
Gujarat	1	265	1	9,729	12,752	707
Haryana	1	29	4	3,016	5,253	228
Himachal Pradesh	38	1,290	122	824	511	147
Jammu & Kashmir	6	639	107	195	405	88
Karnataka	22	70	1	4,835	8,968	906
Kerala	8	11	1	2,557	3,364	7
Madhya Pradesh	15	170	65	4,068	5,685	356
Maharashtra	38	1,864	4,055	25,996	27,116	462
Manipur	8	1,750	150	216	209	101
Meghalaya	12	373	37	425	223	157
Nagaland	11	271	187	202	146	88
Orissa	2	53	2	1,893	3,134	2
Punjab	5	29	1	5,840	3,585	—
Rajasthan	4	154	1	3,137	5,780	569
Tamil Nadu	28	60	8,531	8,784	18,175	175
Tripura	15	567	13	195	189	159
Uttar Pradesh	19	1,045	1	11,873	14,016	179
West Bengal	29	269	1	3,405	5,440	1,057
Union Territories						
Andaman & Nicobar	7	121	1,022	45	39	10
Chandigarh	3	220	115	104	48	7
Delhi	13	1,654	49	649	403	274
Goa, Daman & Diu	16	345	391	647	602	36
Pondicherry	6	162	16	161	235	56
Total	351	12,975	16,774	1,00,369	1,33,839	9,573

(—) = Nil or negligible.

SOURCE: Reserve Bank of India, **Statistical Statements Relating to the Co-operative Movement i India, Part I, Credit Societies, 1977-78,** December 1979.

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Special Reports

Ambitious oil production target

From O. N. KOUL

SRINAGAR

IT seems India has no option but to accept the foreign companies' demand for a share in the oil struck in any of the blocks offered to them. "No company will come without a share in the produce", observed Mr P. C. Sethi, the Union Minister for Petroleum and Chemicals, while talking to newsmen here at the end of a two-day meeting of the consultative committee attached to his ministry. He, however, repeated his earlier observation that no oil would be allowed to go out of the country even if the oil sharing condition were to be accepted.

As is well known, India recently offered 32 blocks to foreign companies for oil prospecting. These comprised 17 offshore and 15 onshore blocks. But, the Centre did not receive bids for all the blocks, delaying finalisation of agreements which, according to Mr Sethi, would be for a period of four years each and were now "in the process of being finalised".

However, if the plans for oil production as unfolded by Mr Sethi succeed, India need not get unduly worried about the participation of foreign companies in its oil prospecting programme. By the end of 1983, the Minister maintained, India's own production of oil was expected to be of the order of 30 million tonnes which would be short of the estimated requirement in that year by only five to six million tonnes. This will be a remarkable advance considering that the imports during the current year are expected to be of the order of 16 million tonnes to meet the estimated requirement of 33 million tonnes after accounting for indigenous production of 16.9 million tonnes. "I am glad to say that we have succeeded in making arrangements for import of these quantities", Mr Sethi said, placing the foreign exchange outgo on oil imports during the current year at about Rs. 5,500 crores against over Rs 6,000 crores last year.

The king-pin in India's effort to at least achieve a near self-sufficiency in oil in the next about three years remains Bombay High where, according to Mr Sethi, the current production level was nine million tonnes against only five million tonnes recently. In 1983, the production level at the Bombay High was expected to be of the order of about 20 million tonnes and thus account for about 66 per cent of the total estimated oil production in the country in that year.

Fortunately, Mr Sethi did not share the enthusiasm found by this correspondent in certain responsible quarters in New Delhi recently about bringing the yield rate of oil wells in India at par with the Soviet Union. "The problem is that of the depletion of wells", he said, placing its "normal rate" at five to six per cent. He, however, added, that India was trying to improve the working conditions on wells, as in Gujarat, with assistance from the Soviet Union and was also reducing the depletion rate of its oil wells by hitting additional sources of supply.

Meanwhile, the Centre has formulated plans for raising the country's oil refining capacity from 31.8 million tonnes at present by another 15 million tonnes by the end of the Sixth Plan period. A six million tonne refinery at Mathura "is in advanced stage of construction and is likely to be commissioned towards the end of the current year". Two other refineries are proposed to be set up in the Sixth Plan period with a total installed capacity of nine million tonnes. With these, the number of oil refineries in the country will go up to 14. Of the 11 refineries at present, only the Digboi re-

---

Foreign currency deposits by non-residents

NEARLY Rs 225 crores worth of foreign currency was deposited at the end of 1979 by the non-residents in the Foreign Currency Non-resident (FCNR) Deposit Account introduced by the Government of India in November 1975. Of this the dollar accounts numbering 51,726 accounted for Rs 193 crores, while the pound sterling accounts numbering 12,896 accounted for about Rs 32 crores. The bulk of the accounts had small deposits — eighty per cent of dollar depositors had amounts below Rs 45,000 ($ 5,000) each while ninety per cent of pound sterling depositors had below Rs 51,000 (£ 3,000) each.

According to a study prepared by the Data Processing Division of the Department of Statistics and published in the February 1981 issue of the *Reserve Bank of India Bulletin*, the inflow of deposits for the two currencies together showed a declining trend from the second half of 1978. The share of fresh remittances in the total deposit amount has also been falling since then. The following table highlights the position of FCNR deposits in pound sterling and US dollar.

	Pound Sterling (Million £)	US Dollar (Million $)
No. of accounts opened	12·986	51,726
Amount	19.83	224.85
Amount in Rs. crores*	31.67	193.31
Proportion (%) deposited through :		
Fresh remittances	84.1	78.7
Transfer from non-resident (external) rupee accounts ..	1.9	2.4
Renewal of FCNR accounts	14.0	18.9

* Rupee equivalents arrived at by using the average of daily conversion rates for each month.

finery of the Assam Oil Company is in the private sector.

Plans have been either undertaken or formulated also for providing additional facilities in the existing refineries to maximise production of middle distillates and other products in short supply". The refineries covered or in the process of being covered are in Gujarat, Barauni, Madras, Cochin, Vizag and Bombay. Pipelines to carry crude oil for the Mathura refinery were also expected to be commissioned by the end of the current year. The product pipeline from Mathura to Delhi was expected to be ready by December this year. The Ambala-Jullundur section was expected to be completed by April next.

EXIM BANK

Catalyst for consortia?

From OUR NEW DELHI BUREAU

NEW DELHI

ARRANGEMENTS to set up the EXIM bank are progressing smoothly and it should start functioning around January 1982. The requisite bill, introduced towards the fag-end of the budget session, is expected to be passed in August. The bank will have an authorised capital of Rs 200 crores and a paid-up capital of Rs 50 crores, which will be provided by the Government, partly as a soft loan. The charter of the bank, of cource, empowers it to also raise funds in the international money market.

Finance Ministry officials concede that in the present circumstances this facility is only of academic value. Interest rates in foreign money markets are high and the bank will be under an obligation to extend concessionary loan assistance to exporters. Patterned after similar banks in Japan, South Korea and the USA, the EXIM bank will extend only medium-term and long-term financial assistance, which means that it will be concerned mainly with promotion of exports of projects, capital goods and other items involving large funds and long gestation periods. Once the EXIM bank commences operations the international finance department of IDBI will cease to function. Of late this department has been experimenting usefully with the idea of single-window clearance by having constituted a working group comprising representatives of the various agencies concerned with clearance. The EXIM bank is now conceived as a giant single window for clearance. At one stage is was opined that the Export Credit and Guarantee Corporation should be merged with the bank. But a contrary view was that ECGC should remain outside and serve as a counter-check. This view has apparently prevailed. As for short-term credit for small-scale exports, it will continue to be disbursed by commercial banks.

When the EXIM bank gets into its stride, one of its major functions will have to be to induce Indian construction companies to adopt the consortium approach while bidding for contracts in West Asia. Indian companies are not strong enough in terms of financial and managerial resources to be able to individually compete with the construction giants of the West and Japan. The recent meeting of the Overseas Construction Council duly underlined the importance of the consortium approach and on various earlier occasions also the idea has received similar formal endorsement. But the consortium approach has continued to elude Indian companies, mainly because of their individualistic ethos. Therefore jumbo contracts have been beyond the reach of Indian competitors.

In many cases the Indian companies have found themselves in the role of sub-contractors to bigger parties from industrialised countries. It is only in Iraq and Libya that the Indian builder has made some mark, and that too because of the apathetic attitude of the western multinationals. The EXIM bank can act as a catalytic agent for inculcation of the consortium habit. It could do this by extending extra financial incentives to companies who show a willingness to pool their resources and come forward as a consortium.

Another constraint is the shortage of cement, steel and other construction materials in the country. To the extent these have to be purchased externally by the companies concerned, the net foreign exchange earnings becomes limited. The task force appointed by the Ministry of Commerce to review India's performance in the field of project exports is perhaps seized of all these problems.

UTI investments in real estate?

BOMBAY

THE Unit Trust of India (UTI) wants to enlarge its areas of investment, one of which could be real estate investment, in a big way. According to Mr G. S. Patel, chairman of the UTI, an amendment of the UTI Act would be necessary and the Government would be approached for the same in the near future. The UTI Board was at present processing the proposals. He has explained that the areas of investment needed to be enlarged in view of the low yields from shares in the stock exchanges which fluctuated too often. The UTI which catered to small and middle class investors could not afford this.

The UTI recently declared a record dividend of 11.50 per cent on a capital of about Rs 390 crores for the year ended June 30, 1981. The dividend on the units on the unit-linked insurance plan (1971) was also raised to 8.75 per cent. Mr Patel also announced on the occasion that the trust proposed to introduce a special scheme for religious and charitable trusts guaranteeing a minimum dividend of 12 per cent. The scheme envisaged a minimum investment of Rs 50,000 by the participating trusts for a minimum period of three years. The participating trusts would not be allowed to withdraw any fund during the first year but withdrawal would be permitted to the extent of 20 per cent in the second year and further to about 50 per cent during the third year. He had also stated that the UTI was planning to introduce a special scheme for non-resident Indians which was being finalised in consultation with the Reserve Bank of India and the Government. The scheme would guarantee minimum return to the investors.

The trust's total income increased to Rs 59.10 crores in 1980-81 from Rs 47.17 crores in 1979-80. It was this factor which had enabled the UTI to declare a record dividend of 11.5 per cent for the year ended June 30, 1981, compared to 10 per cent paid for the previous year. A sum of Rs 5.85 crores was transferred to the reserves increasing them to about Rs 60 crores at the end of 1980-81. Additionally a sum of Rs 3.16 crores was provided at depreciation of investments.

According to the UTI, the trust's total investible funds increased to Rs 523 crores at the end of 1980-81 from Rs 467 crores at the end of the previous year. Of these Rs 412 crores represented investments in the corporate sector. Its investments in equities totalled Rs 130 crores while in preference shares they amounted Rs 15.47 crores. Investments in debentures had increased to Rs 138 crores from Rs 112 crores and company deposits to Rs 66 crores from Rs 39 crores.

Mr Patel was confident that UTI's sales would increase to over Rs 45 crores during the current year. Its sales of units under the 1964 scheme amounted to Rs 40 crores during 1980-81 against Rs 49 crores in the previous year. It had set a target of only Rs 35 crores for the year.

According to Mr Patel, the withdrawal of units as eligible assets for clearing capital gains tax, the entry of public sector undertakings in the market, the upward adjustment in the interest rate structure of commercial banks and other savings media had contributed during the year to intensification of competitive pressure on units.

Need for sugar buffer stock

BOMBAY

THE Maharashtra Rajya Sahakari Sakhar Karkhana Sangh (Maharashtra State Co-operative Sugar Factories Association) has called on the Government to build immediately a buffer stock of 15 lakh tonnes of sugar in order to avoid sharp movement in prices that follow from fluctuations in production of as much as 40 per cent in a four-year cycle. It said that the cost of the buffer stock will be about Rs 30 crores a year and this could be easily met by setting apart five paise per kilo of production.

Its president, Mr Madhavrao Boraste, however, opposed the import of sugar whether for buffer stock purposes or otherwise. He said that India's import of sugar could be compared to Saudi Arabia's import of oil. The country accounted for 16 per cent of the world sugar production, the highest share for any country. It was wrong on the part of the Government, he said, to import sugar and add to Rs 4,500 crores balance of trade gap.

On the contrary, Mr Boraste suggested that the Government should lift the ban on exports from November 15 in order that this country might be able to fulfil its export quotas. He pointed out that the production capacity of sugar industry would rise from 55 lakh tonnes in 1977-78 to 68 lakh tonnes next year. Also sugarcane crop would be a record one as in 1977-78. The experience of the industry during 1977-78 of depressed sugar prices would not be, however, repeated though the prices may be somewhat lower than at present. The domestic consumption of sugar had increased and exports could help in ensuring that stocks were not built to undue proportions.

The Sangh is now in its silver jubilee year, and Mr Boraste took the opportunity of the occasion to speak of the progress of sugar co-operatives in Maharashtra. In the just concluded season, he said, there were 78 factories in operation in the State, of which 68 were sugar co-operatives. These factories accounted for 40 per cent of the country's total sugar production with the share of co-operatives as high as 36 per cent and that of private factories four per cent. He pointed out that sugar was produced in the country in 18 different states but only in Maharashtra, Uttar Pardesh, Tamil Nadu, Andhra Pradesh and Karnataka there was a surplus production. Of that surplus production again Maharashtra's share was as much as 75 per cent, which meant that Maharashtra was supplying sugar to the entire country.

He dismissed the criticism generally made against co-operatives as ill-informed. There was a misleading impression also that the area under cereals, coarse grains and oilseeds had gone down in the State because of expansion of acreage under sugarcane. This was not the case. While in the whole country only 2.3 per cent of the acreage was under sugarcane, the proportion was just 1.5 per cent in Maharashtra. Uttar Pradesh had as much as 9.4 per cent of the area under sugarcane, Haryana 5.4 per cent, Punjab 2.8 per cent, Tamil Nadu 2.7 per cent, Bihar, Andhra Pradesh and Kerala 1.6 per cent each. The figures of the cultivated areas in the State under different crops would make this further clear — jowar 68 lakh

Mr Madhavrao Boraste, chairman of the Maharashtra State Co-operative Sugar Factories Association, died in Bombay on July 22. Mr Boraste, who was 53, had suffered a severe heart attack on the eve of the annual meeting of the association in Bombay on July 15 and had to be admitted to a hospital. Mr Boraste, who is survived by his wife, two sons and a daughter, had also taken active part in the recent farmers' agitation in the State.

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on July 17, 1981 over		
		July 17, 1981	July 10, 1981	June 19, 1981	July 19, 1980	July 17, 1981	June 19, 1981	July 19, 1980
Rice	Average	3.50	3.50	3.50	2.80	—	—	25.0
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.20	2.20	2.20	2.00	—	—	10.0
Bajra	Average	2.20	2.20	2.20	2.00	—	—	10.0
Gram dal	Average	6.20	6.20	6.20	6.00	—	—	3.3
Tur dal	Average	6.50	6.50	6.50	5.50	—	—	18.2
Potatoes	Average	2.00	2.40	2.20	2.60	—16.7	—9.1	—23.1
Onions	Average	1.60	2.00	1.20	1.00	—20.0	33.3	60.0
Milk per litre	Buffalo	6.00	5.00	5.60	4.25	20.0	7.1	41.2
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.51	1.39	—	9.9	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	6.50	6.70	7.60	8.20	—3.0	—14.5	—20.7
Gur	Average	6.00	6.00	6.00	6.00	—	—	—
Groundnut oil	Average	15.00	15.00	14.00	12.00	—	7.1	25.0
Vanaspati	Average	16.00	16.00	15.00	—	—	6.7	—
Toilet soap	—	1.95	1.90	1.90	1.90	2.6	2.6	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

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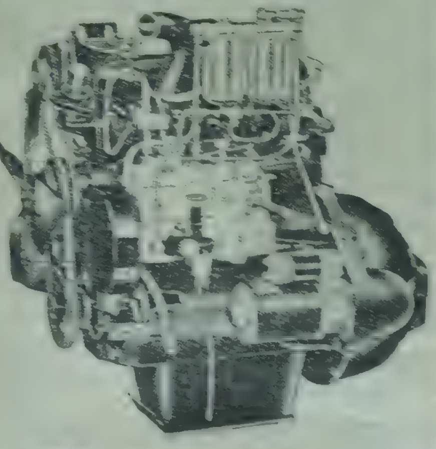

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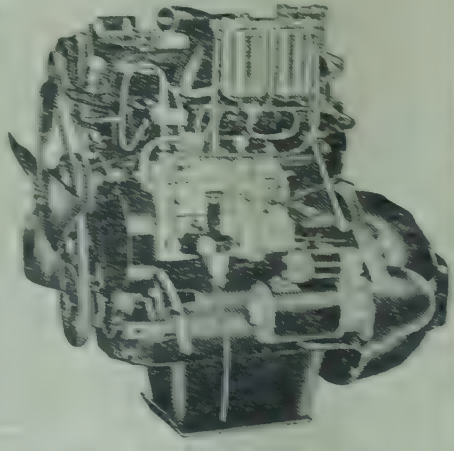

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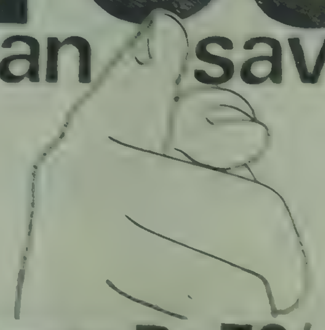

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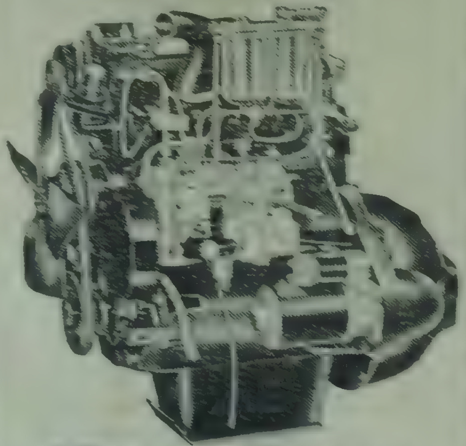

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hectares, cotton 26 lakhs, paddy 15 lakhs, bajra 14 lakhs, wheat 12 lakhs, groundnut 8 lakhs, tur 7 lakhs, gram 5 lakhs and sugarcane only 3 lakhs. He welcomed the State Government's determination to make Maharashtra self-sufficient in foodgrains in four years but expressed the view that unless more area was brought under irrigation this would not be possible. The Barve Committee had recommended that all the irrigation projects in the State should be completed within a period of twenty years by 1981 but the situation was such that no one knew whether they would be completed twenty years hence.

No change in lending rates

BOMBAY

COMMERCIAL banks' lending and deposit rates are not being disturbed despite that the fact that the Bank rate has gone up to 10 per cent from nine per cent from July 11 and the statutory liquidity ratio (SLR) and cash reserve ratio have been increased as a part of anti-inflationary package. This was officially announced after a meeting of the Governor of the Reserve Bank of India (RBI), Dr I. G. Patel, with chief executives of major banks.

Certain adjustments in the interest rates on the re-finance facilities were, however, proposed by the Governor consequent to the change in the Bank rate. First, with effect from July 18 the interest rates on food and export refinance will rise from nine per cent to 10 per cent but the commercial banks' lending rates for food procurement and export

Bombay spot exchange rates of currencies as on 20-7-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.60	9.80.
Austria	A Schilling	188 00	194.00
Belgium	B. Franc	442	451
Canada	C. $	13.35	13.81
Denmark	D. Kroner	84.70	86.00
France	Franc	64.20	65 30
Hong Kong	H.K. $	62 40	64.40
Italy	Lira	13,490	13,630
Japan	Yen	25.60	26 10
Malaysia	M. $	26 00	26.60
Netherlands	Guilder	—	—
Norway	N. Kroner	67.90	69.00
Singapore	S. $	23.80	24.50
Sweden	S. Kronor	57.70	58.80
Switzerland	S. Franc	23.10	23 60
UK	£	5.9425	5.9930
USA	$	11.07	11.27
West Germany	D.M.	26 93	27.40

As I see it

The mirage of exports

THE much-publicised Indian construction contracts in Iraq, which were advertised to be capable of yielding profits of Rs 200 crores, would now be involving this country in a net foreign exchange loss of Rs 340 crores. As is customary in such cases, there is no dearth of explanations for this sorry state of affairs. It is stated that these contracts were entered upon fixed rates without any provision for any escalation of costs. The phenomenon of rising prices has been in this country for quite some time now. It is surprising, therefore, that Indian parties did not look into the possibility of price rise in dealing with the future propositions.

It was also strange that while the Arab countries were clamouring for years on for compensating the Arab oil exporters for the loss of value in dollar on account of price rise in the western countries, the persons in India dealing with the same Arab countries did not bother to safeguard their economic interests while concluding commercial deals with these countries. The fact is that Arab governments are not as soft as the Government of India toward the delinquent foreign contractors — a factor which the Indian parties apparently failed to take into account. There is an aura of unrealism in India's export efforts, where exporting in itself has come to be looked upon as the most desirable activity, irrespective of any consideration of whether the export activity brings a profit or a loss to the country.

Among the factors that have vitiated the price structure of the contracts, the inability of the Indian construction companies to complete jobs as per the original time schedule has been the principal one. In the fixed-time-schedule contracts, heavy penalties are imposed on the non-fulfilment of the project according to time. The danger is that the loss to the country would not be confined to monetary terms but would also involve a loss of goodwill and provide a major point in the propaganda campaign against Indian expertise and capabilities in foreign countries.

The sorry plight of the Indian construction contractors in Iraq should come as a warning against any undue optimism on the outcome of an Indian company having bagged contract for construction in a foreign country. Unfortunately there is hardly any machinery at the level of the Government of India to ensure that whenever any Indian contractor quotes rates for foreign tender the essential profitability of the venture is protected against all exigencies. The export front seems to have been provided for various operators to come forward and claim incentives of one kind or the other, irrespective of whether such an incentive is indeed called for and whether the country was deriving any benefit out of this expenditure from the public exchequer.

The report of the Task Force, which Mr Pranab Kumar Mukherjee, Union Minister of Commerce, announced in the Lok Sabha on May 8, would no doubt examine the profitability aspect of project exports. A campaign is being built up in the country against the provision for the use of at least some India-made equipment and machinery in project exports. In the absence of such a stipulation the so-called project exports turn out to be nothing but a modern version of the supply of indentured labour from India for the development of some economic projects in foreign countries with money as happened in the last century—with this difference that now more educated persons compose the labour force. But the condition of employment is not very much better than that of the indentured labour: The passports of Indians are impounded on arrival and the security of their person is minimal as the manner of death of an Indian engineer recently in Baghdad so graphically brought out!

Subhash Chandra Sarker

credit would, however, remain unchanged.

Secondly, in regard to two re-finance facilities linked to the Bank rate the RBI has decided that effective from the close of business of July 11 (i) the re-finances rate in respect of shipping loans would stand raised from 10.5 to 11 per cent and the lending rates of banks from 11 to 12 per cent and, (ii) the re-finance rates for loans covering imports of capital goods would similarly stand raised from nine to 10 per cent and the lending rates of banks from 11 to 12 per cent. The re-finance scheme for imports of capital goods has already been terminated from July 1, 1981, and the outstanding re-finance has to be repaid by October 1, 1981.

In view of the higher re-finance rates and other measures such as increase in the statutory liquidity ratio the banks will be free to raise those of their lending rates which are below the maximum rates prescribed under the present structure by the RBI. This has been done with the idea of reducing the adverse effect on the profitability of banks.

At the meeting the Governor expressed serious concern over the continued high pace of monetary and credit expansion and the growth of primary liquidity in the economy. He urged the chairmen of the banks to ensure that credit expansion of their banks was kept strictly within the guidelines set out in May 1981 and underlined that banks should not default in maintaining the enhanced cash reserve ratio and statutory liquidity ratio. The need for credit discipline, the Governor emphasised, was all the greater as the banks would have to meet the credit requirements arising from the various steps taken by the Government to enlarge supplies of essential commodities for public distribution.

BUSINESS OPINION

MR C. G. Devaya, chairman, Madras Aluminium Co Ltd : "The aluminium retention prices are being fixed with no provision for automatic escalation for the projected cost increases, under which the operations are to be carried out. As a matter of fact, real costs would have to be computed duly providing for increased depreciation to enable replacement of capital assets at future costs. This aspect has been neglected in the past and is certainly catching up with us, now that our machinery and plant need both replacement and modernisation. Unless there is a committed and sophisticated system for sensoring, monitoring and flexing policies, the better thing would be to decontrol and let responsible business ensure ethical trading, rather than risking the industry being strangulated. The Government perhaps could as well try out deregulation. The lack of adequate retention prices has adversely affected all the primary producers during 1980. We seem to be at a tug-of-war with the Central Government for higher retention prices, all the time, but always at the losing end. With a continuous uncertainty about future pricing and returns, how could we have the confidence to invest in the long term basic needs ?

"The markets have been sluggish from the end of 1980 and have now reached a point where there is sparse demand for both controlled and non-controlled metal. The electricity boards are not placing orders on the conductor manufacturers who have large stocks of metal and their bills for large sums have not been cleared. The high rate of excise duty still retained by the Central Government at 44 per cent acts as a retarder and there is resistance from the end-users.

"The large scale imports by MMTC on the basis of certain projected demand are now found to be far in excess in relation to the reduced demands. The markets are glutted. The MMTC, the producers, the conductor manufacturers and several end-users find themselves with large inventories. We have requested the Government to stop imports and take over our stocks at retention prices or imported prices whichever may be higher duly making up the difference through a rebate of excise duty. A national buffer reserve of imported metal could be established to regulate future availability and prices duly ensuring that domestic production does not suffer. There may be better solutions, but let there be a solution."

MR C. K. Patel, chairman, Adarsh Chemicals and Fertilisers Ltd, discussing the factors leading to the reduced profitability of the company for the year 1980, stressed that the single superphosphate (SSP) got outpriced as compared to other phosphatic fertilisers following price rise declared by the Government. He regretted that the Gujarat Government did not declare special state subsidy on the sale of SSP as was already done by Maharashtra and other states and hoped that even if now also such a subsidy was declared, the farmers of Gujarat would benefit.

The chairman also pointed out the present pricing formula is disadvantageous to the SSP industry in the country as it does not compensate for increase in cost of production on various accounts. The present formula compensates the industry only for increase in cost of raw materials and packing materials.

Shortages and surpluses

Fertiliser

Fertiliser glut in West Bengal. Attributed to inaccurate fertiliser demand estimate and actual allocation made on that basis. Different agencies in West Bengal currently holding a stock of about 10,000 tonnes of nitrogenous fertiliser, 5,000 tonnes of phosphatic fertiliser and 1,500 tonnes of potash.

Wagons

The movement of fertilisers from Visakhapatnam port hit by the stoppage of wagon supply by Railway Board.

Cement

Construction activities in Nagpur suspended for want of cement.

Fast growing garment exports

Concluded from page 164

total reliance on cotton. This proposition also received support from the group on garment exports appointed by the Government of India in 1977. But introduction of man-made fabrics in garment exports will be difficult unless the heavy duties on man-made yarn are removed or lowered. The working group also saw scope for increase in export of silk garments, which at present are minimal. This would require improvement in the quality of silk and more competitive prices.

The employment potential of the Indian garment export industry can be seen from the fact that an investment of only Rs 1,500 to buy two sewing machines provides employment to three persons. A survey conducted by the Garment Exporters Association shows that a random sample of 25 exporters—big, medium and small—had an investment of Rs 2.6 crores, an annual turnover of Rs 24.4 crores and provided employment to 3000 persons.

The next Indian Garment Fair, organised annually by the GEA, will be held in Delhi from September 18 to 20. Delhi is normally the venue as 65 per cent of the garment exporters are located in and around the national capital.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on July 14, 1981)

	High	Low	T.T
Australian $	6.49	6.40	6.5830
Belgium Franc (100)	14.30	13.00	14.400
British £	10.90	10 60	10.805
Burmese Kyat (100)	25.00	15.00	
Canadian $	4 75	4 66	4.7690
French N.F	0 975	0.95	0.9860
Indian Rupee (100)	56 00	52.00	65.45
West German DM	2 35	2.285	2 3615
Indonesian Rupiah (100)	0.88	0.78	
Italian Lira (100)	4 90	4.50	
Japanese Yen (100)	2.495	2.45	2.5135
Korean Won (100)	0.87	0.77	
Malaysian $	2.43	2.39	2.4455
Netherlands Guilder	2.09	2.05	2.1170
New Zealand $	4.85	4.65	4.8695
Pakistan Rupee (100)	4.30	3.80	5 850
Philippine Peso	0.695	0.67	0.7290
Singapore $	2.64	2.60	2.6610
South African Rand	5.40	5 00	6 3310
Sri Lanka Rs. (100)	30.00	22.00	
Swiss Franc	2.74	2.68	2.7720
Taiwan $ (100)	14.60	14.30	
Thai Baht (100)	26.50	25.70	

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	June 27 1981	June 20 1981	May 30 1981	June 28 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	274.9	275.3	274.0	252.9	—0.1	0.3	8.7	35.8
Primary articles	259.4	259.0	256.5	229.1	0.2	1.1	13.2	32.6
Fuel, power, lubricants etc.	400.5	400.3	400.3	352.8	—	—	13.5	57.1
All commodities	279.1	279.1	277.4	251.4	—	0.6	11.0	36.7

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	July 3 1981	June 26 1981	June 5 1981	July 4 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,049	57,760	57,417	48,971	0.5	1.1	18.5	37.3
Bank credit	26,556	26,294	26,178	22,336	1.0	1.4	18.9	35.6
Aggregate deposits ..	40,169	39,927	39,336	33,348	0.6	2.1	20.5	41.7
Foreign exchange reserves(a)	4,879	4,879	4,925	5,299	—	—0.9	—7.9	—14.7

MONTHLY INDICATORS

	Latest month				Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month		Amount/ Index			
Industrial production (crude Index)	1970=100	May.	1981	144.6 (a)	146.6 (a)	—1.4	10 5
Exports	Rs. crores	April	1981	592	502	—17.9	..
Imports	Rs crores	April	1981	968	895	—8.2	..
Trade balance	Rs crores	April	1981	—376	—393	—	—
Foreign exchange reserves (a)	Rs crores	June	1981	4,879	5,047	—3.3	—7.3
Wholesale price Index ..	1970-71=100	June	1981	278.3	276.1	0.8	14.8
Consumer price Index for Industrial workers ..	1960=100	April	1981	427	420	1.7	13.9
Unemployment(d) ..		May	1980	149	148	0.7	..

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	134.5	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,670	6,459	2,523	3.3	14.9
Imports	Rs crores	12,106	8,908	2,955	35.9	22.3
Trade balance	Rs crores	—5,436	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b) ..	Rs crores	55,229	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270*	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.6	217.1	139.7	18.2	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	..	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

MONSOON, CROP AND COMMODITY SURVEY: JUNE 1981

Month-end rains brighten kharif prospects

By Commerce Research Bureau

AFTER the initial early onset, the advance of the southwest monsoon got delayed for some time and for a good part of the month of June large areas in the country were smarting under scorching sun and drought. The picture however turned for the better in the second fortnight of the month with the Bay of Bengal branch of the monsoon advancing into the eastern parts of the country and by the end of the month nearly 69 per cent of the net sown area received good rainfall. Only a week earlier less than 50 per cent of the net sown area had received good rainfall. The timely rains raised hopes of a good kharif crop for which a target of 83 million tonnes has been set. However, the rainfall was deficient in some parts of the country like the states of Assam, Meghalaya, Nagaland and Tripura, sub-Himalayan West Bengal and Sikkim, Bihar plains, hills of west Uttar Pradesh, Rajasthan, the regions of Saurashtra, Kutch and Marathwada and south interior Karnataka and was scanty in Punjab.

Before the onset of the monsoon the drought conditions had become severe in the states of Andhra Pradesh, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu. During the financial year 1981-82, the Union Government has already sanctioned over Rs 109 crores as drought relief to three states—Rs 26.25 crores to Andhra Pradesh, Rs 33.92 crores to Rajasthan and Rs 48.90 crores to Tamil Nadu. The Central assistance was under consideration for Haryana and Karnataka. However, no request for Central assistance was received from the remaining two states of Madhya Pradesh and Maharashtra up to June 23, 1981.

With the wheat procurement falling short of the target of 9.5 million tonnes by over three million tonnes, the foodgrains stocks (excluding coarse grains) with the Government at the end of June 1981 were 13.3 million tonnes as against the stocks of 15.9 million tonnes at the end of June 1980. The composition of the stocks was 7.5 million tonnes of wheat and 5.8 million tonnes of rice against the corresponding figures of 8.8 million tonnes and 7.1 million tonnes respectively for June, 1980.

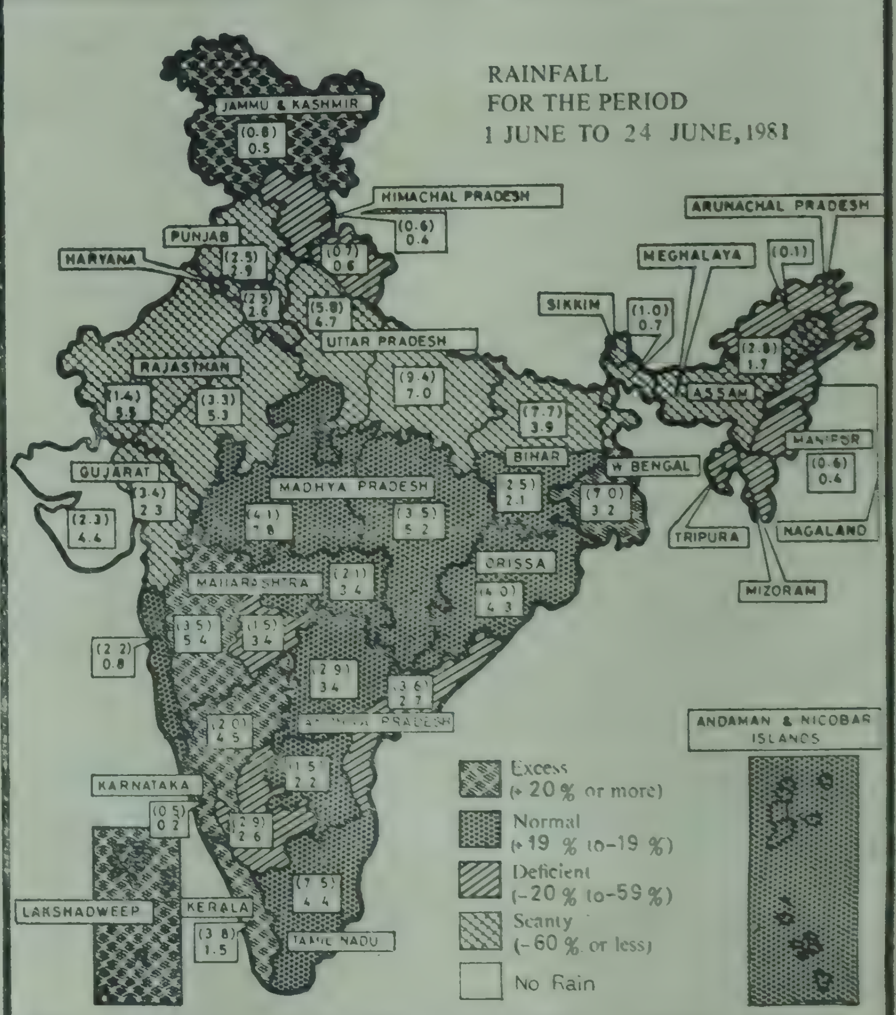
The Agricultural Prices Commission recommended the price policy for kharif crops for the 1981-82 season. The Union Government sought the views of the state governments on the prices recommended for the cereal crops. The cropwise procurement prices recommended are given below:

(Rs per quintal)

Crop	Procurement price	
	1980-81(a)	1981-82
Paddy (common variety)	105	113
Jowar	105	115
Bajra	105	115
Maize	105	115
Ragi	105	115
Cotton (320F) (FAQ)	304	375

Note: (a) Prices fixed by the Centre

Progress of Monsoon


RAINFALL
FOR THE PERIOD
1 JUNE TO 24 JUNE, 1981
JAMMU & KASHMIR
(0.8) 0.5
HIMACHAL PRADESH
(0.6) 0.4
PUNJAB
(2.5) 2.9
HARYANA
(2.5) 2.6
(0.7) 0.6
(5.8) 4.7
UTTAR PRADESH
(9.4) 7.0
RAJASTHAN
(1.4) 5.5
(3.3) 5.3
GUJARAT
(3.4) 2.3
(2.3) 4.4
MADHYA PRADESH
(4.1) 7.8
(3.5) 5.2
BIHAR
(7.7) 3.9
(2.5) 2.1
W BENGAL
(7.0) 3.2
SIKKIM
(1.0) 0.7
MEGHALAYA
ARUNACHAL PRADESH
(0.1)
(2.8) 1.7
ASSAM
MANIPUR
(0.6) 0.4
TRIPURA
NAGALAND
MIZORAM
ORISSA
(4.0) 4.3
MAHARASHTRA
(2.1) 3.4
(3.5) 5.4
(1.5) 3.4
(2.2) 0.8
(2.9) 3.4
(3.6) 2.7
ANDHRA PRADESH
(2.0) 4.5
KARNATAKA
(0.5) 0.2
(1.5) 2.2
(2.9) 2.6
LAKSHADWEEP
KERALA
(3.8) 1.5
(7.5) 4.4
TAMIL NADU
ANDAMAN & NICOBAR ISLANDS
Excess (+20% or more)
Normal (+19% to –19%)
Deficient (–20% to –59%)
Scanty (–60% or less)
No Rain

NOTE: The figures in brackets in each square indicate percentage of the total population (1971) and figures outside the brackets indicate the percentage of the total net sown area (1971-72) in the regions.

Commerce Research Bureau — Map not drawn according to scale

The Union Government decided to set up a National Water Development Agency to exploit fully the irrigation potential of various rivers in the country. To begin with, it would undertake a study of the peninsular rivers.

The monopoly cotton procurement scheme of Maharashtra came to an end on June 30, 1981 as the Centre's sanction to the continuance of the scheme beyond that date was not received. The State Government was however, making efforts to get the Centre's approval to the scheme's continuance.

The proposed import of two lakh tonnes of sugar would help build up a sugar buffer stock, besides immediately bringing down the open market sugar prices, according to the Union Agriculture Minister, Rao Birendra Singh. The entire quantity of imported sugar would be received before the next sugar season. The Minister said sugar production in the next season was expected to be very good and the Government was planning to set up a sugar buffer stock of five lakh tonnes.

The following paragraphs present the Statewise and cropwise position for the month of June 1981.

Progress of the South-west Monsoon during June 81

State/Region	Population 1971 Census (million)	Net area : 1971-72 million hectares			Kharif crops		Rainfall for the period June 1 to June 24, 1981				Rainfall for the week ending June 1981			
		Sown	Irrigated	Percentage of net irrigated area to net sown area	Food	Cash	Normal (mm)	Actual (mm)	Departure from the normal (Percentage)	Over all position	3rd	10th	17th	24th
Andhra Pradesh	43.50	11.27	3.00	26 6	Rice, jowar, bajra, maize and ragi	Castorseed, groundnut, tobacco, mesta, cotton and chillies								
Coastal	19.72	3.71	1.88	50.1			71	31	—56	D	S	S	S	D
Telangana	15.81	4.63	0.66	14.3			90	88	— 2	N	S	D	D	E
Rayaslaseema	7.97	2.93	0.48	16.4			56	48	—14	N	D	S	E	S
Assam	14.63	2.24	0.57	25.4	Rice and maize	Jute and tea	368	125	—66	S	N	D	S	D
Bihar	56.35	8 28	2.38	28 7	Rice and maize	Jute, mesta and potato								
Plateau	14.23	2.90	0.21	7.2			139	135	— 3	N	E	D	D	E
Plains	42.12	5.38	2.17	40.3			130	33	—75	S	E	S	S	S
Gujarat	31.39	9.32	1.21	13.0	Bajra, jowar, rice and maize	Cotton, tobacco, groundnut and castorseed								
Gujarat region	18.47	3.26	0 48	14.7			59	6	—89	S	NR	NR	S	S
Saurashtra and Kutch	12 92	6.06	0.73	12 0			40	0	—100	S	NR	NR	S	S
Haryana (Including Chandigarh & Delhi)	14.37	3 67	1.57	42.8	Bajra, maize, rice and jowar	Cotton and sugarcane	36	5	—95	S	E	S	S	S
Himachal Pradesh	3.46	0 55	0.09	16 4	Maize, rice and ragi	Apples, potato and ginger	69	33	—53	D	E	D	S	D
Jammu and Kashmir	4.62	0 71	0 26	36 6	Maize and rice	Apples and saffron	38	47	25	E	E	E	S	S
Karnataka	29.30	10 33	1.38	13.4	Ragi, jowar, bajra and rice	Safflower, groundnut, cotton coffee and sugarcane								
Coastal	2.79	0 31	0.11	35 5			787	994	26	E	N	E	N	E
Interior North	10.72	6.30	0.45	7.1			84	119	42	E	E	E	E	N
Interior South	15.79	3.72	0.82	22.0			56	43	—24	D	E	N	S	NR
Kerala	21.35	2.19	0.44	20.1	Rice, ragi and tapioca	Tea, coconut, coffee, arecanut, rubber and black pepper	488	895	83	E	E	E	E	E
Madhya Pradesh	41.65	18.46	1.64	8.9	Jowar, maize, rice and bajra	Sesamum, groundnut, cotton and sannhemp								
East	19.31	7.38	0.75	10.2			105	95	—10	N	N	D	S	E
West	22.34	11.08	0.89	8.0			74	66	—11	N	S	S	S	E
Maharashtra	51.31	16.58	1.34	8.1	Jowar, bajra, ragi and rice	Cotton, safflower, groundnut, chillies and sugarcane								
Konkan and Goa	12.30	1.00	0.04	4.0			475	392	—18	N	S	N	D	N
Madhya Maharashtra	19.17	6.96	0.74	10.6			75	107	41	E	N	E	E	D
Marathwada	8.07	4.31	0.27	6 3			104	74	—29	D	S	S	E	S
Vidarbha	11.77	4.31	0.29	6.7			115	104	—10	N	S	D	S	E
Manipur	1.07	0.14	0.07	50.0	Rice	Chillies	—	—	—	—	—	—	—	—
Meghalaya	1.01	0.16	0.04	25.0	Rice	Potato, Jute and mesta	—	—	—	—	—	—	—	—
Nagaland	0.52	0.06	0.01	16.7	Rice	—	—	—	—	—	—	—	—	—
Orissa	21.95	6.12	1.15	18.8	Rice, ragi and maize	Castorseed, sesamum, jute and mesta	144	166	15	N	E	D	S	E
Punjab	13.55	4.08	2.96	72.5	Maize, bajra and rice	Cotton, sugarcane, groundnut and potato	25	8	—67	S	D	S	S	S
Rajasthan	25.77	15.26	2.17	14.2	Bajra, maize and jowar	Cotton, sesamum and sannhemp								
East	17.93	7.48	1.44	19.3			33	3	—90	S	S	S	S	S
West	7.84	7.78	0.73	9.4			16	1	—91	S	S	NR	S	S
Tamil Nadu (Including Pondicherry)	41.67	6.35	2.71	42.7	Ragi, rice, bajra and jowar	Tea, chillies, groundnut, sesamum, cotton and sugarcane	37	39	5	N	E	E	E	S
Tripura	1.56	2.40	0.02	0 83	Rice	Jute, mesta and tea	—	—	—		—	—	—	—
Uttar Pradesh	88.34	17.32	6 99	40 4	Maize, bajra, rice and jowar	Sesamum, potato and sugarcane								
East	51.97	9.87	3.70	37.5			64	22	—66	S	N	S	S	D
West (Plains)	32.55	6 58	3.15	47.9			52	11	—78	S	N	S	S	S
West (Hills)	3.82	0.87	0.14	16.1			124	53	—57	D	E	S	S	D
West Bengal	44.33	5 71	1.49	26 1	Rice	Jute, mesta, tea and potato								
Sub-Himalayan and Sikkim	5.57	0.97	0 12	12.4			489	188	—62	S	D	D	S	S
Gangetic	38 76	4 74	1.37	28.9			187	252	35	E	E	D	S	E

NOTES : E = Excess, i.e. + 20 per cent or more N = Normal, i.e. + 19 per cent to — 19 per cent D = Deficient, i.e. — 20 per cent to — 59 per cent S = Scanty i.e.—60 per cent or less NR = No rain

Figures of rainfall for Assam include also those for Meghalaya

ANDHRA PRADESH

The State Government proposed to set up an edible rice bran oil extraction plant at an estimated cost of rupees one crore as a joint venture at Bhimavaram in West Godavari district.

The Coffee Board urged the State Government to bring an additional 20,000 hectares under coffee cultivation, thus employing nearly 35,000 tribal families throughout the year. The Andhra University was among the six universities chosen to impart training under the manpower development for coffee plantation expansion programme. Nearly 1,500 people, including senior executives and superiors, would be trained under the programme in the latest techniques of coffee cultivation.

ASSAM

As a result of the heavy rains in the last week of the month the Brahmaputra and its tributaries were in high spate.

Drought in the State during the months April-June caused considerable damage to "ahu" paddy and jute crops. The worst affected districts were Kamrup, Goalpara and Darrang. The area affected was 40,000 hectares under 'ahu' paddy and 1.14 lakh hectares under jute.

BIHAR

The Planning Commission approved seven irrigation schemes in the State at a total estimated cost of Rs 39.7 crores under which reservoirs would be constructed at Latratu, Tapkara, Suru, Torlow, Sonua, Nandini and Sindwarni. On completion, these projects would irrigate an additional 42,416 hectares in Rohtas, Ranchi, Singhbhum and Monghyr districts.

The State Government decided to launch the Centrally sponsored minikit project in the State during the coming kharif season to increase the acreage under the high yielding varieties of paddy. It was hoped that the project would help the State Government achieve the current year's food production target which was fixed at 116 lakh tonnes as against the last year's target of 110 lakh tonnes.

Scarcity of sugar was reported from many parts of the State during the month as there was delay in transportation of sugar from Maharashtra.

GUJARAT

The State Government had taken steps to increase the oilseeds production from the present 1.8 million tonnes to 2.5 million tonnes. Out of the targeted 2.5 million tonnes, 2.3 million tonnes would be groundnut and the remaining 200,000 tonnes would be other oilseeds. Seeds and agricultural kits for this purpose had been already supplied to about 2,000 farmers in Vadodara district. About 20,000 farmers would be covered in the State for growing soyabean crop.

The State Government fixed the profit margin for oil millers and crushers, wholesale and retail dealers in groundnut oil. The margins were half a per cent on landing price for millers, one per cent for wholesalers and two per cent for retailers and would take effect from July 1, 1981.

The Cotton Corporation of India (CCI) procured 2.14 lakh bales of cotton this year in the State as against 1.64 lakh bales procured during the previous year—a rise of over 30 per cent.

HARYANA

The Chief Minister, Mr Bhajan Lal, claimed that the State had achieved the target of 64 lakh tonnes of foodgrains production in the 1980-81 season and that it was now set to achieve the higher target of 70 lakh tonnes for 1981-82 season.

The State Government decided to introduce crop insurance from the forthcoming kharif season for rice in 13 tehsils and for bajra in four tehsils on an experimental basis. Crop insurance for wheat would be introduced from the next rabi season in 39 tehsils in the State.

HIMACHAL PRADESH

The Chief Minister announced cash subsidy of Rs 25 a quintal on all grades and varieties of apples sold to the Himachal Pradesh Horticulture Produce Marketing and Processing Corporation. The Corporation aimed at crushing about 1.50 lakh quintals of apples during 1981-82. The rupees four-crore plant of the Corporation at Parwanoo was expected to go into full production very soon.

A Rs 12-crore cold storage project with a storage capacity of 14,250 tonnes would be set up in the co-operative sector in the State with the World Bank aid.

A high-level study team of the Reserve Bank of India calculated that the total short-term agricultural credit needs of the State would be Rs 51 crores by the end of June 1983.

JAMMU & KASHMIR

A study team appointed by the Reserve Bank of India recommended the reorganisation of primary agricultural credit societies, rehabilitation of State and Central co-operative banks, measures for the recovery of overdues and constitution of a common cadre o secretaries for the primary agricultura credit societies in the State. The stud team estimated the short-term crop loa requirements of the State at Rs 17 crores

KARNATAKA

Nearly 10,000 sheep reportedl perished in the rinderpest epidemi raging in Bellary, Dharwar, Chitradurga and Shimoga districts.

The silk output in the State wa likely to show a 20 per cent drop during the current year, due to the 'uzi fly menace.

KERALA

The State Government was asked by the Centre to reduce the minimum support price of cocoa beans to facilitate exports. The State Government decided to abolish the 4.5 per cent purchase tax on cocoa.

The World Bank-aided Special Agricultural Development Unit (SADU) in the State would take up a scheme to rejuvenate coconut cultivation in about 3,500 hectares during 1981-82.

The monopoly procurement of raw cashew in the State crossed the targeted mark of 60,000 tonnes during the 1980-81 season out of a total production of 88,000 tonnes.

MADHYA PRADESH

Efforts were being made to encourage small farmers and landless labourers to take to tusser sericulture in Balaghat, Mandla, Chhindwara, Raisen and Jhabua districts. During 1980-81 the State produced 6.59 crore cocoons as against 3.37 crore cocoons in 1979-80.

The State Government was faced with an uphill task to achieve its wheat procurement target of two lakh tonnes. The State had so far achieved only about 50 per cent of the target despite a two-month vigorous drive and a ten per cent levy on traders.

MAHARASHTRA

The advance of the southwest monsoon at the end of the month in Konkan, north Deccan and Marathwada regions enabled the farmers to start sowing operations. In all the four districts of the Konkan—Sindhudurg, Ratnagiri, Raigad and Thane—sowing of paddy and ragi seeds has been completed. In the Pune and Vidarbha regions, sowing of kharif crops like jowar, bajra, groundnut, tur, cotton and pulses was undertaken. In the Marathwada region 40 per cent sowing had been completed.

The State Government fixed the foodgrains production target for 1981-82 at 115 lakh tonnes as against the production of 90 lakh tonnes during 1980-81

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The State Government's Monopoly Cotton Procurement scheme came to an end from July 1, 1981 with the expiry of the Maharashtra Raw Cotton (Procurement, Processing and Marketing) Act, 1971 on June 30, 1981. However, a draft bill seeking the extension of the scheme for 10 years was forwarded to the Centre by the State Government. Meanwhile the Maharashtra State Co-operative Marketing Federation (MSCMF) announced a reduction of Rs 75 in the per candy prices of Varalaxmi cotton of the 1980-81 season with effect from June 19, 1981.

The Planning Commission approved the Rs 72.66-crore Nandur Madhameshwar irrigation project on the Darna river. The project, when completed, would provide irrigation to 43,860 hectares of land in Ahmednagar and Aurangabad districts.

The Maharashtra State Seeds Corporation would distribute 5,600 tonnes of improved jowar seeds to farmers for the kharif season. The Corporation would also distribute 22,000 quintals of quality cotton seed for sowing this season as against 9,000 quintals last season.

The Maharashtra State Co-operative Bank Ltd decided to grant loans to cotton growers in the dry belt for raising capital for setting up co-operative spinning mills in the State. Under the scheme prepared by the Bank, each cotton grower would get a maximum loan of Rs 3,000 while the marginal cotton grower owning about three hectares of land would be completely exempted from payment of the interest.

ORISSA

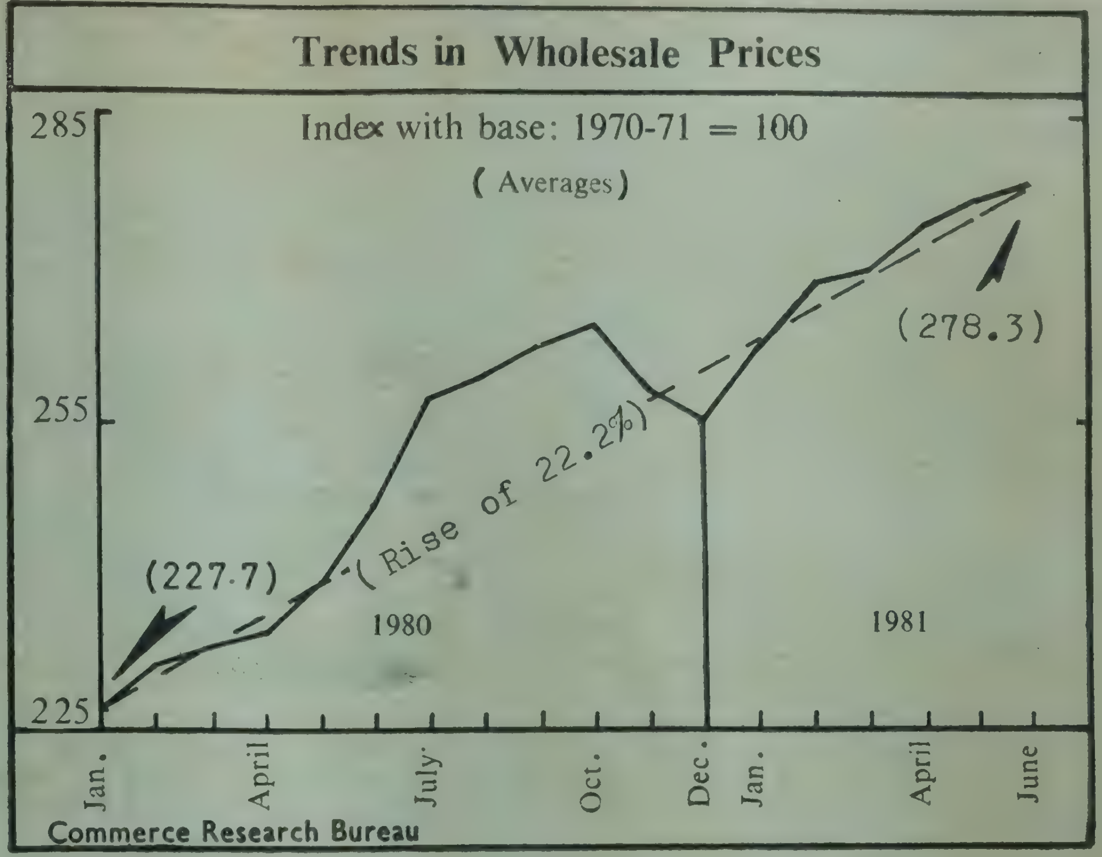
The Agriculture Department of the State fixed an ambitious programme to boost the foodgrains production to 64.64 lakh tonnes during 1981-82 as against 54.82 lakh tonnes during 1980-81. To achieve the target it was decided to increase the area under high yielding varieties of crops.

PUNJAB

According to an official survey Karnal Bunt disease of wheat crop was reported to have spread over eight districts—Gurdaspur, Patiala, Amritsar, Firozpur, Ludhiana, Kapurthala, Hoshiarpur and Jalandhar. The disease was detected to the extent of 13 to 43 per cent in samples collected from these areas. The Union Ministry of Agriculture asked the Indian Agricultural Research Institute, New Delhi, to evolve a strategy to control the disease.

RAJASTHAN

According to the State's Minister of State for Public Health, the schemes formulated for supply of drinking water


Trends in Wholesale Prices

PRICES IN JUNE 1981

Uptrend persists

THE wholesale price index continued to move upwards and reached the level of 278.3 during June 1981, an increase of 0.8 per cent over the preceding month. During the first quarter (April-June 1981) of 1981-82 the wholesale price index was higher by 14.8 per cent over the corresponding period of 1980-81. (Last year during this period prices had increased by 21.1 per cent over the corresponding period of 1979-80).

The table alongside presents the percentage variation in the wholesale price index for all commodities since January 1980, while the table below gives the groupwise indices for June 27, 1981 with variations over the corresponding indices a month ago and a year ago.

Month	Wholesale price Index (Average) (1970-71=100)	Percentage change
1980		
January	227.7	+0.3
February	231.4	+1.6
March	233.2	+0.8
April	235.0	+0.8
May	240.1	+2.2
June	247.2	+3.0
July	257.3	+4.1
August	259.8	+1.0
September	262.9	+1.2
October	264.6	+0.6
November	258.4	—2.3
December	255.3	—1.2
1981		
January	262.6	+2.9
February	268.1	+2.1
March	269.5	+0.5
April	274.6	+1.9
May	276.1	+0.5
June	278.3	+0.8

Index number of wholesale prices

(Base: 1970-71=100)

Group	Weight in the official index	June 27, 1981	May 30, 1981	June 28, 1980	Percentage variation on June 27, 1981 over May 30, 1981	Percentage variation on June 27, 1981 over June 28, 1980
Manufactured products	49.9	274.9	274.0	252.9	0.3	8.7
Rubber & rubber products ..	1.2	270.8	267.8	241.5	1.1	12.1
Primary articles ..	41.7	259.4	256.5	229.1	1.1	13.2
Non-food articles ..	10.6	240.1	234.6	208.2	2.3	15.3
Fuel, power, light & lubricants	8.4	400.5	400.3	352.8	—	13.5
All commodities ..	100.0	279.1	277.4	251.4	0.6	11.0

in the State and the assistance made available by the Centre for this purpose had been inadequate, because as many as 24,000 of the 33,000 villages in the State were facing shortage of drinking water and a sum of Rs 400 crores was required during the next five years to tackle the problem. The Centre had, however, permitted an expenditure of Rs 198 crores only. He, therefore, requested the Centre to provide more funds for the programme and also take into account the State's cattle population while formulating water supply schemes.

The World Bank agreed to give a credit of Rs 64 crores to help implement a Rs 138-crore water supply and sewerage project in Rajasthan. This project would provide water to about 2,000 villages in 10 districts of the State as also improve and extend water supply and sewerage system in some important cities like Jaipur, Jodhpur and Bikaner.

SIKKIM

An official team headed by Dr K. G. Tejwani, Director of the Central Soil and Water Conservation Research and Training Institute, Dehra Dun which studied the land-use pattern in the State, recommended the setting up of a Cardamom Research Centre to evolve suitable agro-techniques for its cultivation including the control of pests and diseases. Cardamom was recommended as a crop for research because in spite of its being the most important cash crop of the State its per hectare yield was extremely low.

TAMIL NADU

Punjab would supply rice to the State following a contract made with Tamil Nadu Civil Supplies Corporation. The movement of rice from Andhra Pradesh with which a contract for one lakh tonnes of non-levy rice was made had just started.

Though the State could tide over the difficult food situation till the *Kurvai* paddy came into the market by December end, the Centre was supplying only 25,000 to 30,000 tonnes per month to the State as against a promised supply of 85,000 tonnes a rice a month according to the State's Finance and Food Minister.

The State Government prepared a three-year programme at a cost of Rs 1.10 crores to raise inland fish production in the State. The project consisted of construction of nurseries, rearing ponds, breeder ponds and the like at 10 centres for achieving an additional production of 100 million fingerlings by the end of the project period.

The State Government urged the Centre to import short staple varieties of cotton from Pakistan and supply them to spinning mills in the State for the manufacture of coarser varieties of yarn, mostly needed by the handloom weavers. The State Government also had sent emissaries to Gujarat and Maharashtra to explore the possibility of securing short staple cotton for its spinning mills.

TRIPURA

The State expected to set a new record by exceeding its tea production target of six million kg this year owing to favourable weather conditions and peaceful industrial relations in the industry. The per hectare yield of tea also recorded an increase from 777 kg in 1978 to 800 kg in 1980.

UTTAR PRADESH

The foodgrain production target of the State for the year 1981-82 envisaged an increase of one milion tonnes over the anticipated production of 23.2 million tonnes during 1980-81. Accordingly, the agricultural development programmes to be taken up would be aimed at achieving an annual growth rate of 5.5 per cent in the agricultural sector. The wheat production target had been set at 11.4 million tonnes—0.8 million tonnes higher than that of last year. The target of rice production was 6.2 million tonnes as compared to the anticipated production of 6 million tonnes last year. A marginal decrease of 50,000 tonnes in last year's target of 2.1 million tonnes for coarse grains had been fixed for this year.

The Ramganga irrigation project had so far created an irrigation potential of 5.65 lakh hectares. An additional potential of 6.75 lakh hectares was proposed to be created by the end of 1984-85, the terminal year of the Sixth Plan. In the command area of the Project, 20,000 km-long water courses had been either remodelled or newly constructed.

The State Government decided to set up a fertiliser corporation on the pattern of other manufacturing corporations with a view to producing and selling fertilisers in the State. The new corporation would be entrusted with the responsibility of establishing four gas-based fertiliser plants involving an investment of Rs 2,400 crores with the help of Central assistance and funds from financial institutions.

Several drinking water supply schemes prepared by the Uttar Pradesh Jal Nigam were being implemented on a priority basis to provide potable water in the rural areas.

The Uttar Pradesh Governor promulgated the Uttar Pradesh Land Laws (Amendment) Ordinance, 1981, whi sought to provide relief to the schedul castes and other landless agricultu labourers against eviction from the la allotted to them by the State Gover ment or *gaon sabhas.*

A project had been drawn up f implementation of social forestry in t State during the Sixth Plan on priori basis because of shortage of fodd fuel and raw material for rural cotta industries. The project would be spre over 41 districts of the State.

WEST BENGAL

The cereal production in the Sta had increaesd by 6 per cent during t past four years. The target fixed f cereal production during 1981-82 w 10 million tonnes as against 9.2 milli tonnes last year. The target for Am paddy had been fixed at 64 lakh tonne Aus paddy 8 lakh tonnes, Boro pad 11 lakh tonnes, wheat 14 lakh tonne oilseeds three lakh tonnes and puls one lakh tonne during the current yea

Four of the State's backward di tricts Jalpaiguri, Cooch Behar, Banku and Purulia have been selected f massive fertiliser education programm under the Indo-UK Fertiliser Educatio Project. The project would be unde taken by the Hindustan Fertiliser Co poration for a period of five yea initially.

The slow pace of identification an recording of share-croppers was causin concern to the State's Land Reform Department which decided to exten the "Operation Barga" time limit up t December 31, from June 30, 1981. Th utilisation of officials for municipal elec tions and assembly and parliamentar bye-elections was cited as the reaso for the slow pace.

The State Government extended th scope for institutional finance to bar gadars during 1981. The target for suc loan recipients was fixed at 2.50 lakh as against the total number of recipient of about 1.30 lakhs last year.

The State Government proposed t take legal steps for the extension of th last date of June 12, 1981 for submis sion of returns under section 10(1) o the West Bengal Land Holdings Reve nue Act, 1979. Under the Act nearl five to six lakh *raiyats* were to submi returns to the Government for assess ment of their land holdings in the rura areas.

The Jute Corporation of India fixe the procurement target for the State a 8.75 lakh bales of raw jute for the 1981- 82 jute season. It purchased 4.70 lak bales of raw jute in the State durin the 1980-81 season (July-June).

A severe cyclone accompanied by torrential rain lashed Midnapore district on June 20-21, 1981. Several rivers in the district crossed the danger level as a result. Many low-lying areas were flooded and seedlings destroyed.

Rice

The Agricultural Prices Commission (APC) recommended Rs 113 per quintal as the procurement price for common variety of paddy for the 1981-82 kharif marketing season (November 1981-October 1982). This marked an increase of Rs 8 per quintal over last year's procurement price of Rs 105. The Centre had sought the views of the States on the APC's recommendation.

In the Delhi market the price of rice (basmati) increased by 21.2 per cent over the month to Rs 450-550 per quintal.

Wheat

Wheat procurement in the current rabi marketing season (April 1981-March 1982) until June 27, 1981 totalled 62.5 lakh tonnes as against the target of 95 lakh tonnes. The procurement during 1980-81 was 58 lakh tonnes. Punjab procured the maximum quantum of 37 lakh tonnes followed by Uttar Pradesh with 13 lakh tonnes. Haryana procured 11 lakh tonnes and other States accounted for about two lakh tonnes.

The price of wheat (dara) in the Rohtak market at Rs 130-148 per quintal showed a fall of 2.8 per cent over the month.

Jute

The Centre fixed the statutory minimum price for W-5 grade jute for the 1981-82 jute season (July 1981-June 1982) at Rs 175 per quintal ex-Assam, as recommended by the Agricultural Prices Commission, an increase of Rs 15 per quintal over the last year's floor price of Rs 160 per quintal.

The Industrial Reconstruction Corporation of India sanctioned Rs 4.88 crores to four jute mills under the National Jute Manufacturers Corporation to enable them to implement their crash programme for modernisation and renovation of plant and machinery.

The Union Government decided in principle to allow the Jute Corporation of India (JCI) to continue raw jute export for the 1981-82 season. The JCI concluded raw jute export contracts totalling nearly 2.5 lakh bales valued at about Rs 12 crores against shipment schedule extended up to May-June 1981. Over 50 per cent of the total contracted quantity had already been shipped.

The JCI fixed a procurement target of 21 lakh bales of raw jute for 1981-82 season, as against 10.60 lakh bales procured by the JCI and co-operatives in 1980-81. Unsold stock with the JCI was reduced to 10.30 lakh bales from 27.45 lakh bales by disposing of 15.67 lakh bales to private and nationalised mills and exports of 1.46 lakh bales.

In West Bengal, the Corporation would purchase 8.75 lakh bales and the State Co-operative Marketing Federation 4.5 lakh bales for the 1981-82 season. Procurement in north Bengal would commence on July 15 and in south Bengal on August 15. About 60 panchayats would function as purchasing agents for the JCI. The JCI and the Federation would buy raw jute from two lakh identity card holders in the eight border districts of the State.

In the Calcutta market the price of Jute (W-5) ruled steady over the month at Rs 217.50 per quintal.

Cotton

The Cotton Corporation of India (CCI) so far purchased about 11.30 lakh bales of cotton during the 1980-81 season (September 1980 to August 1981). Its sales amounted to 10.90 lakh bales (including the sales of 1979-80 season cotton). The Corporation sold 4.47 lakh bales of 1980-81 season cotton to the National Textile Corporation (NTC) mills. It also offered 67,000 bales of cotton (grown in Karnataka) to the mills in the south to tide over the difficult supply position.

The Agricultural Prices Commission recommended an increase of Rs 71 in the support price of cotton (320 F) FAQ to Rs 375 per quintal for the 1981-82 cotton season (September 1981-August 1982).

The price of cotton (CJ-73) in the Bombay market showed a rise of 3.1 per cent over the month to Rs 1,378 per quintal.

Oilseeds

Special emphasis was proposed to be laid on increasing production of oilseeds during 1981-82 in view of the rising import bill for edible oils. The state governments were asked by the Centre to take immediate steps in this respect. The production target for oilseeds for 1981-82 was fixed at 11.2 million tonnes, an increase of a million tonnes over the production of 10.2 million tonnes during 1980-81. The target for groundnut was fixed at 6.7 million tonnes and for rapeseed and mustard at two million tonnes.

The Union Civil Supplies Ministry raised the imported edible oils quota for States during the month by ten per cent. The quantity allocated for the public distribution system was 41,000 tonnes.

Over the month the price of groundnut (kernels) in the Kanpur market showed an increase of 10.5 per cent over the month to Rs 750-830 per quintal.

Sugar

Sugar production during May 1981, the eighth month of the 1980-81 season (October 1980-September 1981), was 77,000 tonnes as against 44,000 tonnes during the corresponding month last year. Total production in the first eight months was 50.41 lakh tonnes as against 37.97 lakh tonnes during the corresponding period last year. Despatches during May were 4.66 lakh tonnes for internal consumption and nil for exports as against 6.11 lakh tonnes for internal consumption and nil for exports during the same month last season.

Total offtake in the first eight months was 30.48 lakh tonnes for internal consumption and 0.60 lakh tonnes for exports as against 36.45 lakh tonnes for internal consumption and 2.30 lakh tonnes for exports during the corresponding period last year. The closing stock of sugar with the factories as at the end of May 1981 was 25.28 lakh tonnes as against 20.07 lakh tonnes at the same time last year.

The Centre retained the tariff value of Rs 640 per quintal for free sale sugar during July 1981.

India purchased about two lakh tonnes of sugar in the international market and efforts were being made to see that the whole quantity reached Indian ports as early as possible. The imported sugar would be available for distribution before the start of the festive season—September to November. The Centre ordered the release of 4.51 lakh tonnes of sugar for internal consumption during July consisting of 2.71 lakh tonnes of levy quota and 1.80 lakh tonnes of free sale quota, the same as for the last month.

In the Bombay market the price of sugar (C-30) declined by 6.9 per cent over the month to Rs 668-670 per quintal.

Rubber

The Union Ministry of Commerce decided to continue till July 15, 1981 the present minimum statutory price of Rs 825 per quintal for RMA-I grade of natural rubber with differentials for other varieties.

The shortfall in natural rubber during 1981-82 was expected to be about 37,300 tonnes excluding the balance 10,000 tonnes of 1980-81. The State

Spot prices of agricultural commodities: June 1981

(Rs per quint

Commodity	Market	Variety	June 30, 1981	May 30, 1981	June 30, 1980	June 30, 1979	Percentage variation on June 30, 1981 over a month	a year	tw yea
I. Foodgrains									
(1) Rice	Delhi	Basmati	450–550	325–500	275–575	350–500	21.2	17.6	17
	Hapur	Basmati	475–520	460–480	460–500	350–360	5.9	3 6	40
	T'guddem	Fine	308.11-310.81	283.78–297.30	270.27–283.78	—	6.5	11.7	
(2) Wheat	Bhatinda	Farm	137–143	137–147	140–150	—	—1.4	—3 4	
	Delhi	Deshi	190–225	190–230	160–185	125–135	—1.2	20.3	59
	Rohtak	Dara	130–148	140–146	117–130	—	—2.8	12.6	—
(3) Barley	Bhatinda	Average	108–130	110–118	110–118	—	4.4	4.4	
	Hapur	Average	118–125	125–128	122–125	78-82	—4.0	—1.6	1.
(4) Jowar	Solapur	Average	145–165	145–165	140–155	—	—	5.1	—
	Karnal	Average	140–175	128–138	115–129	—	18.4	29.1	—
(5) Bajra	Ahmedabad	Average	160–170	165–180	120–142	—	—4.3	26.0	—
	Shrirampur	Average	185–200	190–198	160–178	—	—0.8	13.9	—
(6) Maize	Hapur	Average	140–170	125–140	132–150	120–130	17.0	9.9	24.
	Karnal	Average	148–160	135–150	112–122	—	8.1	31.6	—
(7) Gram	Bombay	Deshi	365–470	405.475	305–315	210–215	—5.1	34.7	96.
	Hapur	Average	300–350	300–350	250–285	155–182	—	21.5	92.
	Rohtak	Kabli	410–470	370–465	288–292	—	5.4	51.7	—
II. Fibres									
(1) Cotton	Bombay	Varalaxmi (A)	1898	1,884	1687	1,772	0.7	12.5	7.
	Bombay	CJ-73	1378	1,336	—	—	3.1	—	—
	Bombay	L-147(A)	1561	1,547	1,125	1,153	0.9	38.8	35.
	Bombay	A-51-9	1525	1,504	1,111	1,019	1.4	37.3	49.
	Bombay	Bengal Deshi	1040	1,026	703	717	1.4	47.9	45.
(2) Jute	Calcutta	W-5	217.50	217.50	206	235	—	5.6	—7.
III. Groundnut and its oil									
(1) Groundnut (Kernels).. ..	Bombay	Karad Bold	589	570	460	380	3.3	28.0	55.
	Kanpur	Average	750–830	680–750	535	310-345	10.5	47.7	141.
	Rajkot	Average	516.67	512.50	383.33	383.33	0.8	34.8	34.
(2) Groundnut oil ..	Bombay	—	1385	1,350	1,025	857.50	2.6	35.1	61.
	Madras	—	1350	1,300	1.000	790	3.8	35.0	70.
	Rajkot	—	1332.50	1,290	950	825	3 3	40.3	61.
IV. Others									
(1) Sugar	Bombay	C-30	669-670	709–720	625	256–258	—6.4	7.0	160.
	Hapur	—	690-720	700–730	610-625	266–268	—1.4	14.2	164.
(2) Khandsari	Hapur	Superior	480–540	480–540	480–540	233–240	—	—	115.
	Delhi	Deshi	640-660	640–660	540–560	—	—	18.2	—
(3) Gur	Hapur	Dhaia Sup.	270–285	280–290	335–340	151-153	—2.6	—17.8	88
(4) Tea	Bombay	Average	2300	2.300	2,400	2,250	—	—4.2	2.

Trading Corporation (STC) contracted for the import of full quota of 37,000 tonnes of natural rubber; of this 23,000 tonnes had arrived. The STC proposed to distribute 9,000 tonnes of imported rubber from July 1, 1981.

The Centre formulated a policy for distribution of imported natural rubber to the small-scale sector. The policy stipulated that 100 tonnes of rubber would be distributed to units whose annual consumption as per the Rubber Board licence was below 12 tonnes.

Tea

Unfavourable weather conditions resulted in a decline in tea production during the current season. The estimated total output at the close of May 1981 was 122.23 million kg, 12.85 million kg lower than the production in the same period last year. The production of north Indian tea during the first five months of 1981 was 70.58 million kg, 10.2 million kg lower than the output during the corresponding period last year. The output in south India was lower by 2.65 million kg than the production in 1980.

The committee on small tea growers set up by the Union Commerce Ministry identified the major problems faced by tea growers in Tamil Nadu and Kerala as stemming from low productivity and the unremunerative prices for green leaf tea.

During 1980-81 India exported 7.21 lakh kg of tea bags valued at Rs 3.1 crores as against 4.93 lakh kg of tea bags valued at Rs 2 crores exported in the previous year.

The price of tea in the Bombay market ruled steady at Rs 2,300 per quintal during the month.

Coffee

The Union Government exempted coffee from the whole of the export duty of Rs 1,500 per tonne with effect from June 19, 1981 in view of the decline in the international price of coffee.

The export target for coffee was fixed at 80,000 tonnes in 1981-82 against 85,000 tonnes exported in 1980-81.

The International Coffee Organisation, governing the world coffee trade, imposed a 10 per cent cut in the producers' export quota to arrest the decline in the price of the commodity.

LAKSHMI MACHINE WORKS LIMITED

NOTICE

It is hereby notified for the information of the public that Lakshmi Machine Works Limited proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a Notice under sub-section (I) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969 for substantial expansion of its activities. Brief particulars are as under :

(i) Name(s) of Person(s)/Body Corporate owning the undertaking. LAKSHMI MACHINE WORKS LIMITED

(ii) Capital structure of the applicant undertaking:

		Rupees
AUTHORISED :		
6,00,000	Equity shares of Rs. 100/- each	6,00,00,000
ISSUED:		
4,12,394	Equity Shares of Rs. 100/- each	4,12,39,400
SUBSCRIBED AND PAID-UP :		
2,30,989	Equity Shares of Rs. 100/- each	2,30,98,900
23,001	Equity shares of Rs. 100/- each allotted as fully paid-up otherwise than for cash consideration	23,00,100
1,52,394	Equity Shares of Rs. 100/- each allotted as fully paid-up without payment being received in cash as bonus shares by way of capitalisation of Reserves.	1,52,39,400
		4,06,38,400

(iii) Details of the proposed substantial expansion :

(a) Names of new goods to be produced, supplied, controlled or distributed, or of new services to be rendered. The Company proposes to manufacture Open-End Spinning Machines in collaboration with M/s. Rieter Machine Works Limited, Switzerland.

(b) In the case of substantial expansion of existing activities :
  - (i) Name of goods)
  - (ii) Capacity before expansion)
  - (iii) Expansion proposed)
  - (iv) Location of the project for substantial expansion) Not applicable
  - (v) Brief outline of the cost of the project, the scheme and source of finance.)

2. Any person intersted in the matter may make a representation to the Secretary Department of Company Affairs Government of India, Shastri Bhavan, New Delhi, within 14 days from the day of publication of this Notice intimating his views on the proposal and indicating the nature of his interest therein.

Dated : 6th July, 1981.

Registered Office :
SRKV Post,
Perianaickenpalayam,
Coimbatore-641 020

(sd) D. JAYAVARTHANAVELU,
Managing Director.
(Name and designation of the Principal Officer of the Undertaking issuing the Notice).

Rustom Mills and Industries Limited makes the finest textiles and technical rubber products.

It also makes the most impressive financial picture.

A 1537% return on shareholders' investment over the last 10 years. Four bonus issues of 1:1, 1:2, 1:1 and 1:1 during the same period.

Rustom Mills and Industries Limited today manufactures the finest cotton and blended fabrics, and Kissan brand dehusking rollers, processing rollers and other technical moulded rubber products.

FUTURE PLANS:

After displaying a tremendous growth and diversification over the last 10 years, under the dynamic leadership of Prafull Anubhai, Rustom Mills and Industries Limited is now set to grow still further.

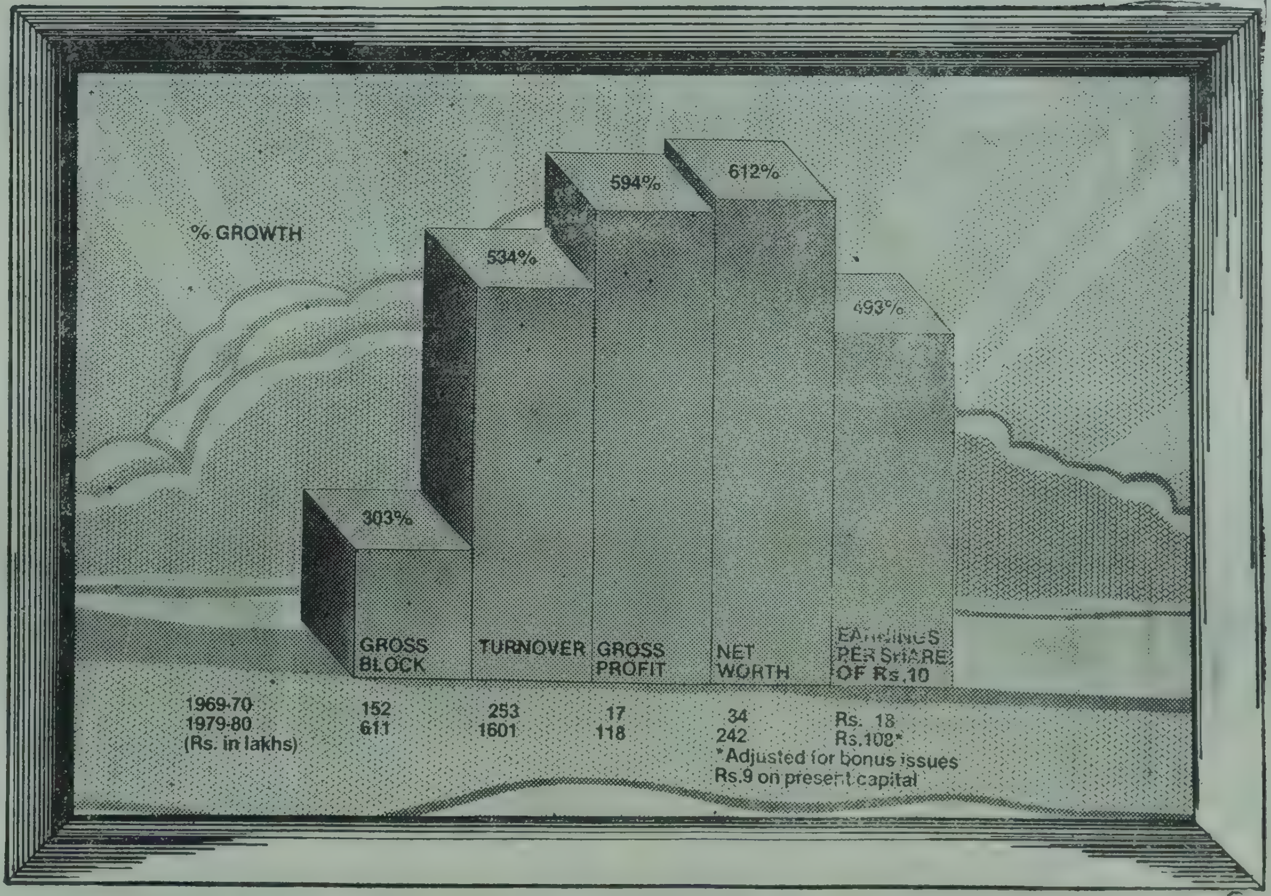
It has plans for the installation of high speed automatic looms, expansion of spindle capacity in its Textile Division, and for the manufacture of textile cots, aprons, and rubber blankets in the Rubber Division.

THE CONVERTIBLE DEBENTURE ISSUE:

The Company will soon offer 2,00,000 Convertible Debentures of Rs. 100/- each, at par. The Debenture holders will be entitled to convert Rs. 30/- out of each Debenture into 2 fully paid Equity Shares of Rs. 10/- each at a premium of Rs. 5/- per Share, after just one year from the date of allotment. If any bonus issue is made prior to conversion, the entitlement of Debenture holders will be increased proportionately. The Debentures are fully secured and carry an interest rate of 13.5% (payable half-yearly). Further 1% per annum additional interest will be paid to Debenture holders provided the Equity dividend exceeds 16% in the preceding year. Such rate of dividend will be appropriately adjusted in case of any bonus issue, during the currency of the Debentures.

You will find Rustom's Debenture Issue a very profitable investment, giving an annual return of 31%.

Your Investment in one Debenture	Rs. 100/-
Less Value of two Equity Shares even at the market price of Rs. 35/-per Share (price as on 2/7/81 Rs. 37/-)	Rs. 70/-
Your Net Investment after conversion	Rs. 30/-
However you get Interest @ 13.5% on balance Amount of Rs. 70/- (Initial Investment Rs. 100/- less Amount converted Rs. 30/-)	Rs. 9.45
Your Annual Return after conversion $\frac{9.45 \times 100}{30}$	31%



Rustom Mills And Industries Ltd

Brij House, Opp. Gujarat High Court, Stadium Road, Ahmedabad 380 014

The issue opens on 10th August,1981.

Rustom Convertible Debentures for Security and Appreciation

CORPORATE SECTOR

In the market

Rustom Mills & Industries

Rustom Mills and Industries Ltd (Regd Office: Brij House, opposite Gujarat High Court, Stadium Road, Ahmedabad 380 014) is offering to the public 140,000 fully secured debentures of Rs 100 each for cash at par totalling Rs 1.40 crores. At the same time it has reserved 60,000 debentures of like value for its equity shareholders, directors, their associates, friends and relatives and employees. In all, thus, Rs 2 crores are proposed to be raised between August 10, 1981 and August 21, 1981 during which period the subscription list will be kept open. In any case, the list will not close before August 12, 1981. The proceeds will finance the company's modernisation programme.

Rustom Mills has had a chequered history. It was a sick unit when Mr Prafull Anubhai took over the same in 1967 and under his stewardship the company soon turned the corner and began making brisk profits which during the last ten years have risen by 594 per cent to Rs 118 lakhs in the wake of the 534 per cent increase in turnover to Rs 1,604 lakhs. Mr Prafull Anubhai told newsmen in Bombay that right from the time the company was taken over, he went in for a modernisation programme and for identifying right product-mix for the company. This has paid rich dividends, so much so that the company came out with four bonus issues in the last ten years. He pointed out that an investor who held ten shares in 1969-70 in the company was now effective holder of 120 shares. In the case of new debentures, the holder will have an option to convert Rs 30 into two equity shares of Rs 10 each at a premium of Rs 5 per share after one year from the date of allotment (the present net worth of a Rustom equity is said to be Rs 37).

Mr Prafull Anubhai said the company holds a licence to expand spindle capacity by 14,000 from the current 26,000 and also proposes to double the number of Sulzer looms to 24. Besides, the company has been managing a previously sick co-operative spinning mill with 25,000 spindles at Visnagar and has been buying its entire production on contract. Negotiations for take-over of yet another sick textile unit have been completed, but the seller has failed to fulfil the conditions required of him. He said that the company had already diversified into rubber products and paddy dehusking rollers made by the rubber division have established their name in the market. The division also manufactures processing rollers and other moulded products. Very shortly commercial production of textile costs and aprons will begin and the manufacture of two-wheeler and three-wheeler tyres and tubes is also on the cards. Mr Prafull Anubhai pointed out that the profitability of the rubber division was much better than that of the textile division.

Garware Plastics & Polyester

Garware Plastics and Polyester Ltd (Regd Office: L-6, New Industrial Estate, Chikalthana, New Aurangabad 431 003) will enter the capital market on August 3, 1981 with a public issue of 33,13,980 equity shares of Rs 10 each totalling Rs 3.1398 crores to be issued at a premium of Rs 3 per share. Thus, in all the public issue is expected to yield Rs 4.308174 crores. Side by side 1,74,420 equity shares of Rs 10 each are being reserved for issue at a premium of Rs 3 per share to employees and business associates of the company.

Mr B. D. Garware, chairman of the company, told newsmen in Bombay that the proceeds of the issue will be used to partly finance a Rs 11.40-crore project to expand the existing polyester film capacity from 600 tonnes to 1,500 tonnes a year and to set up a new captive plant for the manufacture of polyester chips, the raw material for making polyfilm. Thus, it would be a backward integration for the company. Mr Garware pointed out that expansion of film capacity, being undertaken at Chikalthana, was expected to be completed by the beginning of 1982. The polyester chip plant, being set up at Walunj, also in Aurangabad, should be in production by the end of 1982, he added.

Mr Shashikant Garware, managing director and vice-chairman of the company who has been the spirit behind the project, said that the company had become a pioneer in the manufacture of biaxially oriented polyester film not only in India but also in South East Asia. Enquiries from abroad had come in soliciting technical know-how of the company and these were being processed. He pointed out that polyester film had unlimited applications and so marketing of the product was no problem. Immediately, however, the product had established its application in x-ray, audio/video/computer tapes, cassettes, offset printing, electric motor insulation, cable wrapping, packaging and so on. Continuous R&D efforts were on to find newer and newer applications at the Nasik plant.

Mr B. D. Garware expected total turnover of the company to go up to Rs 40 crores after completion of the project as against about Rs 25 crores in 1980. The company's was an established name in the Indian and overseas markets and it had a consistently good record of performance. The present block value of equity share was about Rs 18 as against the face value of Rs 10. He hoped the shareholders would not have to wait long for a good return on their investment.

Wimco

Wimco Ltd (Regd Office: Indian Mercantile Chambers, Ramjibhai Kamani Marg, Bombay 400 038) will enter the capital market on August 3, 1981 with a public issue of 5 lakhs non-convertible secured redeemable debentures, bearing interest at 13.5 per cent per annum, of the face value of Rs 100 each to be issued at par. The proceeds of the issue will be used to meet part of the company's working capital requirments for a wide range of activities like chemicals, paper, engineering, electrodes and foods. The special features of the debenture issue are the willingness of the company to buy them back at par after the first year, a return of 14.5 per cent in 1981 and each successive year in which equity dividend exceeds 14 per cent, and upward revision of interest rate in line with prevailing debenture interest rates.

Other developments

Mafatlal Fine maintains

The Mafatlal Fine Spg & Mfg Co Ltd has reported higher sales for the year ended March 1981 at Rs 85.44 crores compared to Rs 70.30 crores in the previous year. The net profit, after providing Rs 1.97 crores (Rs 1.59 crores) for depreciation and Rs 32 lakhs (Rs 1.28 crores) for taxation, amounted to Rs 2.98 crores (Rs 2.50 crores). The equity dividend recommended for the year under review is 17 per cent (same) payable on the higher capital resulting from 1 : 3 bonus issue during 1980-81. An amount of Rs 1.08 crores (Rs 74 lakhs) is transferred to investment allowance reserve and Rs 20 lakhs (Rs 80 lakhs) to general reserve.

TELCO: Bonus shares proposed

Tata Engineering & Locomotive Company Ltd has reported higher sales for the year ended March 1981 at Rs 609.65 crores compared to Rs 448.27 crores in the previous year. The net profit, after providing Rs 16.16 crores (Rs 13 crores) for depreciation, was Rs 24.37 crores (Rs 17.62 crores). The equity dividend recommended for the year under review is 20 per cent (same). An amount of Rs 6.65 crores (Rs 6.30 crores) is transferred to investment allowance reserve and Rs 11.47 crores (Rs 5.07 crores) to general reserve. Exports during the year under review were Rs 52.43 crores (Rs 46.95 crores). The company proposes to issue 2:5 bonus shares, subject to necessary approval.

Ramon group enters travel agency business

The Ramon group of companies has added another activity to its business by entering the travel agency business through their new travel wing—Elbee Services Private Ltd. The number of companies in the group thus rises to eleven.

Apart from the usual travel agency services, Elbee Services has introduced a scheme whereby travellers can fly at any time they like and pay subsequently. This scheme offers credit facility on reasonable terms. The company also intends to provide a broad-based service including rail bookings, car hiring at different places and hotel reservations to the customers who are undertaking group travel or foreign trips.

Saraswat Co-operative Bank: Higher profit

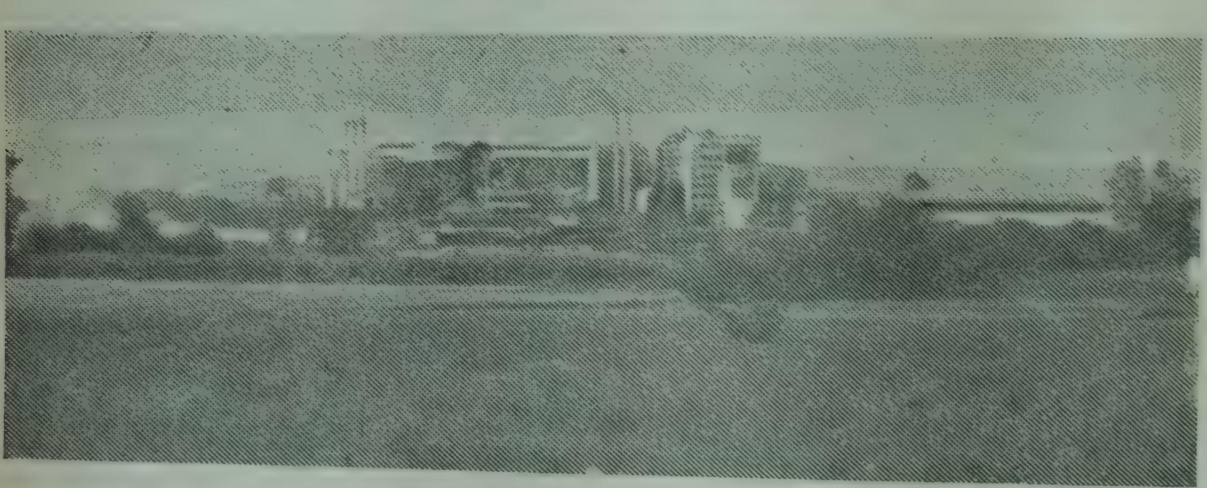
The Saraswat Co-operative Bank Limited has recorded all round progress during the year ending June 30, 1981. The net profit alone rose by 45 per cent from Rs 35.11 lakhs in the preceding year to Rs 51.16 lakhs for the year just ended. The paid up share capital has gone up from Rs 12 lakhs to Rs 156 lakhs, an increase o 30 per cent. The deposits have registered an increase of Rs 1,312 lakhs ove the last year's figure of Rs 4,911 lakh (27 per cent) and stand at Rs 6,22 lakhs. Advances have gone up by R 355 lakhs (12 per cent).

The Committee of Managemen proposes to recommend dividend o 12 per cent per annum being the maximum permissible under the Maharashtra Co-operative Societies Act, 198

With the additional four branche opened during the year under repor the branch strength of the bank stand at 34 out of which one each is in th backward areas of Marathwada an Konkan.

The bank has liberalised its schem of financial assistance to technocrat from Rs 0.50 lakhs to Rs 1.50 lakh with interest at 12½ per cent per annum An arrangement with Housing Development Finance Corporation to sponsor applicants in need of housing finance for loans up to Rs 0.70 lakhs wit interest at 12½ per cent per annum i another step in the direction of meeting housing needs of its depositors an making long term finance available t them.

Mysore Papers' newsprint unit



The Rs 145-crore expansion project of the Mysore Paper Mills Ltd., at Bhadravati in Karnataka has gone on stream. It started trial production on its Beloit Walmsley machine with deckle width of 7.1 m, designed to reach a speed of 750 metres per minute. Now, three years and nine months after receipt of industrial licence from Government of India, the largest paper machine in the country has started forming a continuous web of paper.

Pre-commissioning activity had started as early as March 1981, when MPM was steadily gearing into a state of readiness each of the various inputs necessary for the production of newsprint. These are: power at 3.3 kv and 440 volts and the DC power to run the main drive motor of the paper machine, steam at 4 kg/sq cm at the desired throughput, compressed air at 7.5 kg/sq cm in desired quantity, vacuum pumps to create vacuum on the paper machine, fresh water at a pressure of 3.5 kg per sq cm pulp and the manpower.

The heartening news of Mysore Paper Mill starting trial production comes at a time when the newsprint situation in the country continues to be bleak with demand reaching 3,50,000 tonnes per annum and installed capacity remaining at 60,000 tpa.

While the start-up production in the MPM newsprint project has been programmed to be with imported chemical and thermo mechanical pulp, it is expected that by August 1981, the captive pulping system in the mills will meet the required quantities of pulp to ensure the gradual increase in production. With the commercial production of newsprint by MPM a few months hence, 60 per cent of capacity will have been reached the very first year of production.

Forthcoming company meeting

JULY 25 TO JULY 31

Mahindra Spicer Ltd, Taj Maha Hotel, Apollo Bunder, Bombay 400 039 (*July* 27, 4 *p.m.*)

Radio & Electricals Ltd, 11, Victoria Crescent Road, Madras 600 008 (*July* 27, 4 *p.m.*)

Usha Alloys & Steels Ltd, Hote Oberoi Grand, 15, Jawaharlal Nehru Road, Calcutta 700 013, (*July* 29 3.30 *p.m.*)

Thana Electric Supply Co Ltd M. C. Ghia Hall, Bhogilal Hargovindas Bldg., 18/20 Kaikhushru Dubash Marg Rampart Row, Bombay 400 023, (*Jul* 30, 4.30 *p.m.*)

Ellora Paper Mills Ltd, Kamalnayan Bajaj Hall, Bajaj Bhavan, Nariman Point, Bombay 400 021, (*July* 31 3.30 *p.m.*)

Killick Nixon Ltd, Rama Watumal Hall, K. C. College Bldg., Dinshaw Wacha Road, Bombay 400 020, (*Jul* 31, 3.30 *p.m.*)

Gillanders Arbuthnot & Co Ltd. The Bengal Chamber of Commerce & Industry (Main Hall), Royal Exchange 6, Netaji Subhas Road, Calcutta 700 001 (*July* 31, 3 *p.m.*)

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Boots Company (India)		German Remedies		Ranbaxy Laboratories		Sondoz (India)		Unichem Laboratories	
Industry Group	Chemicals		Chemicals		Chemicals		Chemicals		Chemicals	
	Year ended December		Year ended December		Year ended December		Year ended December		Year ended September	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	376.8	409.9	348.5	391.1	255.7	301.3	826.8	914.0	233.3	241.9
(i) Paid-up capital (a+b)	226.4	226.4	204.0	204.0	93.0	163.2	250.0	250.0	72.0	90.0
(a) Equity	226.4	226.4	204.0	204.0	69.8	140.0	250.0	250.0	72.0	90.0
(b) Preference	—	—	—	—	23.2	23.2	—	—	—	—
(ii) Reserves	150.4	183.5	144.5	187.1	162.7	138.1	576.8	664.0	161.3	151.9
2. Borrowings (i+ii)	222.8	253.5	431.9	652.1	462.2	602.9	770.3	1,046.3	254.6	371.4
(i) Long-term	78.9	63.4	—	—	87.8	75.6	59.2	115.2	34.1	65.4
(ii) Short-term	143.9	190.1	431.9	652.1	374.4	527.3	711.1	931.1	220.5	306.0
3. Non-current liabilities and provisions	—	—	4.2	2.0	—	—	71.9	87.4	—	—
4 Current liabilities and provisions	339.6	397.0	261.6	184.1	196.7	275.7	1,182.5	1,102.9	179.8	240.0
Assets (at the end of the year)										
5. Gross fixed assets	464.7	535.7	370.4	434.8	350.0	434.3	1,116.6	1,259.6	357.3	446.4
6. Less depreciation	159.5	197.2	145.2	175.6	79.9	99.0	678.9	739.4	185.5	219.7
7. Net fixed assets (5—6)	305.2	338.5	225.2	259.2	270.1	335.3	437.7	520.2	171.8	226.7
8. Current assets (i+ii+iii)	634.0	721.9	821.0	970.1	641.7	833.9	2,412.3	2,628.9	487.3	625.6
(i) Inventories	485.9	508.3	496.5	558.7	418.9	539.7	1,410.6	1,619.0	270.0	343.9
(ii) Receivables and loans and advances	126.5	184.9	305.7	368.3	186.7	255.7	753.7	793.0	167.9	257.4
(iii) Others	21.6	28.7	18.8	43.1	36.1	38.5	248.0	216.9	49.4	24.3
9. Other assets	—	—	—	—	2.8	10.7	1.5	1.5	8.6	1.0
Total : Liabilities (1 to 4) or Net assets (7 to 9)	**939.2**	**1,060.4**	**1,046.2**	**1,229.3**	**914.6**	**1,179.9**	**2,851.5**	**3,150.6**	**667.7**	**853.3**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,535.7	1,827.6	1,590.3	1,814.0	1,203.9	1,567.6	4,212.6	4,672.8	1,096.6	1,353.6
11. Increase in stock of finished goods and work in progress	60.6	–5.8	82.0	11.7	51.7	15.0	349.8	183.9	–10.3	43.0
12. Value of production (10+11)	1,596.3	1,821.8	1,672.3	1,825.7	1,255.6	1,582.6	4,562.4	4,856.7	1,086.3	1,396.6
13. Other income	19.9	16.0	1.3	1.0	17.9	77.5	77.5	103.8	4.7	4.3
Expenditure										
14. Materials, stores and other mfg. expenses	815.8	950.1	923.7	1,054.6	760.3	1,049.7	3,015.7	3,197.2	570.4	785.8
15. Current repairs	29.3	33.2	21.0	34.7	12.8	14.4	52.6	57.9	16.4	19.7
16. Salaries and wages	283.5	312.5	211.2	235.6	135.4	170.9	386.2	497.2	213.8	252.7
17. Welfare expenses	17.0	19.8	22.5	26.0	19.3	15.8	39.3	48.3	11.3	11.4
18. Managerial remuneration	0.2	0.4	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.3
19. Other expenses	225.5	255.4	151.4	159.6	154.3	195.8	405.8	538.1	184.0	212.7
20. Depreciation	30.9	40.0	21.2	31.6	18.7	19.2	66.3	75.6	22.2	34.7
21. Other provisions	—	—	—	—	—	—	10.8	23.0	—	—
22. Operating profit (12+13)—(14 to 21)	214.0	226.4	322.4	284.3	172.3	193.9	662.9	522.9	72.5	83.6
23. Interest	18.6	30.1	55.0	90.9	64.6	90.5	80.3	169.6	35.5	51.2
24. Tax provision	125.7	126.3	185.6	125.2	46.0	51.0	430.0	224.0	19.4	17.3
25. Profit after tax (22—23—24)	69.7	70.0	81.8	68.2	61.7	52 4	152.6	129.3	17.6	15.1
Appropriations										
26. Dividends (i+ii)	45.3	45.3	28.6	28.6	10.5	16.5	40 0	40.3	10.8	13.5
(i) Equity	45.3	45.3	28.6	28.6	8.0	14.0	40.0	40.3	10.8	13.5
(ii) Preference	—	—	—	—	2.5	2.5	—	—	—	—
27. Profit retained (25—26)	24.4	24.7	53.2	39.6	51.2	35.9	112.6	89 0	6 8	1.6
Total : Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,616.2**	**1,837.8**	**1,673.6**	**1,826.7**	**1,273.5**	**1,660.1**	**4,639.9**	**4,960.5**	**1,091.0**	**1,400.9**
Operational indicators (per cent)										
(a) Net worth total net assets	40.1	38.7	33.3	31.8	28.0	25.5	29.0	29.0	34.9	28.3
(b) Inventories net sales	31.6	27.8	31.2	30.8	34.8	34.4	33.5	34.6	24.6	25.4
(c) Operating profit net sales	13.9	12.4	20.3	15.7	14.3	12.4	15.7	11.2	6.6	6.2
(d) Operating profit/total net assets	22.8	21.4	30.8	23.1	18.8	16.4	23.2	16.6	10.9	9.8
(e) Profit after tax/net worth	18.5	17.1	23.5	17.4	24.1	17.4	18.5	14.1	7.5	6.2
(f) Equity earning/equity capital	30.8	30.9	40 1	33.4	84 8	35.6	61.0	51.7	24.4	16 8
(g) Equity dividend	20.0	20.0	14.0	14 0	12.0	10.0	16.0	11.5	15.0	15.0
(h) Equity dividend coverage. (No. of times)	1.5	1.5	2.9	2.4	7.1	3.6	3.8	4.5	1.6	1.1
(i) Paid-up value per equity share (Rs.)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	100.00	100 00
(j) Market price of an equity share (Rs.)	27.75	24.50	28.50	26.00	36.75	20.25	44.00	29.50	181.25	160.00
(k) Gross yield	7.2	8.2	4.9	5.4	3.3	4.9	3.6	3.9	8.3	9.4
(l) Gross fixed assets formation	22.7	15.3	10.9	17.4	23.8	24.1	12 0	12 8	10.2	24.9
(m) Debt/equity	0.21:1	0.15:1	..	..	0.34:1	0.25:1	0.07:1	0.13:1	0.15:1	0.27:1

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometimes made in other items also. Totals may not add up due to rounding off.

EQUITIES

Squaring up business

Bombay, July 18

Dalal Street was finally open for trading on July 17 after suspension of operations for about two weeks. The trading was, however, in the nature of squaring-up of outstanding business in the case of 'A' group shares and spot delivery basis in 'B' group shares.

The suspension of operations was mainly due to labour problem created by the staff members of sharebroking firms and partially due to payment difficulties faced by certain brokers. According to the market sources, the 16th account was settled and the way is paved for normal trading from next week. The last business in the nature of squaring-up business took place on July 2. The last regular trading, however, took place on June 26.

The equity sentiment remained subdued when trading was resumed and share prices declined sharply on bull offerings as well as short selling. Fears of further dose of anti-inflationary measures by the Government induced marketmen to unload part of their holdings.

Century opened on a hesitant note at Rs 783 against the previous official closing of Rs 785 and the scrip started moving up in later dealings to Rs 791. The closing was, however, at Rs 789 on scattered profit-taking.

Despite the improved working results for 1980-81 and two-for-five bonus issue announcement, Standard came in for offerings and the scrip yielded Rs 35 at Rs 623. Bombay Dyeing moved down from Rs 100 to Rs 94 before the price was finally placed at Rs 97. ACC, TELCO, Indian Dyestuff, Gwalior Rayon, Tata Oil, Premier Auto, Amar Dye-Chem, Tata Chemicals, Scindia and Hindustan Motors lost marked ground. Tata Steel was quoted at Rs 298 xd against Rs 298.50 on cd.

In the cash section, Nirlon advanced from Rs 73 to Rs 80 on official announcement that the board might consider the bonus issue at the board meeting on July 23. Profit-taking, however, brought down the price to close unchanged at Rs 73. Baroda Rayon dropped to Rs 347 from Rs 362, Indian Rayon to Rs 76.50 from Rs 83 and GSFC to Rs 428 from Rs 450. Indian Organic was quoted at Rs 335 xd against Rs 345 cd. MICO, however, was in the limelight on sustained buying on hope of bonus shares.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 4-7-81	High	Low	Closing quotations 18-7-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	240.00*	—	—	240.00*
Bombay Dyeing (25)	100.00	103.00	94.00	97.00
Central India (50)	69.00	68.00	65.00	68.00
Century (100)	785.00	791.00	778.00	789.00
Dawn (50)	76.00	—	—	76.00*
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	122.50*	—	—	122.50*
Gokak (100)	214.00*	—	—	214.00*
Gwalior Rayon (10)	68.00	55.50	53.00	53.50
Khatau (100)	255.00	255.00	250.00	252.50
Kohinoor (100)	64.00	67.00	64.00	67.00
Morarjee (100)	270.00	—	—	270.00*
National Rayon (100)	390.00	375.00	375.00	375.00
New Great Eastern (100)	99.00	—	—	99.00*
Phoenix (100)	46.50*	—	—	46.50*
Podar (10)	8.75*	—	—	8.75*
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	73.50*	—	—	73.50*
Standard (100)	658.00	632.00	620.00	623.00
Svadeshi (100)	175.00*	—	—	175.00*
Swan (100)	245.00*	—	—	245.00*
Tata Mills (25)	28.00	27.00	24.00	24.00
Electric				
Ahmedabad (100)	82.00	95.00	85.00	95.00
Andhra Valey (100)	128.00*	150.00	150.00	150.00
B.Subarban(100)	111.00	112.50	112.00	112.50
Tata Hydro (100)	132.00	150.00	132.50	150.00
Tata Power (100)	132.00	150.00	134.00	150.00
Steel				
Mukand (10)	30.50	29.00	28.00	29.00
Tata Steel (100)	298.50cd	301.00xd	295.00xd	298.xd
Engineering				
Larsen & Toubro (10)	67.00	65.00	63.50	64.00
Tata Eng. & Loco (100	685.00	685.00	655.00	665.00
S.L.M. Maneklal (100)	195.00	—	—	195.00*
Voltas (100)	286.00	—	—	286.00*
Walchandnagar (100)	185.00	188.00	188.00	188.00
Dyes & Chem				
Amar Dye-Chem (100)	172.50	172.50	167.50	167.50
Indian Dyestuff (100)	270.00	262.00	256.00	260.00
Polychem (50)	80.00	75.00	72.00	72.00
Tata Chemical (10)	72.00	72.00	67.50	68.00
Shipping				
Great Eastern (10)	64.00	66.00	65.00	65.50
Scindia (20)	33.75	33.25	31.25	31.50
Cement				
A.C.C. (100)	183.00	185.00	170.00	170.00
Shree Digvijay (100)	161.50	170.00	165.00	170.00
Sugar				
Maharashtra (50)	57.00	—	—	57.00*
Phaltan (50)	43.00	43.00	43.00	43.00
Miscellaneous				
Bombay Burmah (25)	45.50	45.50	45.00	45.00
Hindustan Motors (10)	28.50	26.75	25.75	25.75
Premier Automobiles (100)	260.00	271.50	258.00	260.00
Pre. Construction (50)	82.00	80.00	78.00	80.00
Sirpur Paper (10)	32.50	30.50	29.00	30.50
Tata Oil (25)	118.00	120.00	106.00	106.00
W. Coast Paper (100)	117.50*	117.50	115.00	115.00
Wimco (10)	14.25	14.00	14.00	14.00
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	362.00	355.00	346.00	347.00
Century Enka (100)	1,100.00*	—	—	1,100.00*
Garware Nylons (10)	41.00	39.00	38.50	38.50
Gold Mohur (100)	98.00*	—	—	98.00*
Indian Rayon (10)	83.00	80.00	75.50	76.50
J. K. Cotton (10)	22.00	21.50	21.50	21.50*
J. K. Synthetics (10)	56.50	53.00	52.50	53.00
Lakshmi Vishnu (100)	60.00*	—	—	60.00*
Mafatlal Fine (100)	263.75	261.25	258.75	261.25
Mafatlal Industries (125)	400.00	385.00	385.00	385.00
Modella Woollen (10)	10.00*	—	—	10.00*
Modipon (10)	67.00*	—	—	67.00*
Nirlon (10)	73.00	80.00	73.00	73.00

	Closing quotations 4-7-81	High	Low	Cl qu
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	
Textiles				
Raghuvanshi (100)	162.50*	—	—	16
Raymond Woollen (10)	44.00*	45.00	45.00	4
Reliance Textile (10)	102.25	102.75	102.00	10.
S. I. Viscose (100)	280.00	280.00	265.00	27
Stretch Fibres (10)	9.00*	9.00	9.00	
Swadeshi Polytex (10)	16.50	16.50	16.50	1
Electric				
Amalgamated (10)	9.50	9.00	8.50	
Surat (100) ...	95.00*	—	—	9
Cement				
Mysore Cement (10)	35.50	33.50	33.00	3
Saurashtra Cement (100)	140.00*	115.00	115.00	11
Paper				
Andhra Paper (100)	245.00*	—	—	245
Bhadrachalam (10)	19.50	—	—	19
Jayant Paper (100)	177.50*	—	—	177
Rohit (100)	215.00*	—	—	215
Steel, metals, alloys				
Ennore Foundries (10)	37.50	—	—	37
Ferro Alloys (100)	290.00	300.00	285.00	300
Hind Aluminium (10)	57.00	52.00	50.50	51
Khandelwal Ferro (100)	140.00	—	—	140
Mahindra Ugine (10)	61.00	58.00	53.00	58
Tata Yodogawa (100)	175.00*	—	—	175
Engineering				
Associated Bearings (100)	391.25	398.25	385.00	385
Bimetal Bearings (10) ...	42.00	43.00	41.00	43
Blue Star (10)	33.00	34.50	33.00	34
Elecon Engineering (100)	425.00	435.00	435.00	435
Gujarat Steel Tube (100)	565.00	575.00	560.00	575
Hindustan Brown (100)	306.25*	—	—	306
Ingersoll-Rand (10) ...	114.00	110.00	105.00	110.
Jyoti (100)	207.50	210.00	207.50	210.
Kirloskar Cummins (100)	560.00	550.00	550.00	550.
Kirloskar Oils (10) ...	33.00cr	33.00xr	32.00xr	32.
Kirloskar Pneumatic (10)	50.00*	53.50	50.50	53.
Mahindra (10)	55.00	56.00	53.00	54.
New Standard (100) ...	125.00	125.00	120.00	125.
Sandvik Asia (100) ...	353.75*	350.00	350.00	350.
Vulcan-Laval (10) ...	35.50	37.50	35.50	37.
Zenith Steel (10) ...	58.00	59.00	55.00	57.
Cables & Elec.				
Asian Cables (100) ...	337.50	—	—	337
Bajaj Electricals (100) ...	170.00*	—	—	170
Crompton Greaves (100)	370.00*	375.00	365.00	375.
Otis Elevator (10) ...	54.50	—	—	54.
Siemens India (10) ...	50.50	50.00	50.00	50.
Chemicals				
BASF (10)	57.00	58.50	58.50	58.
Bayer (India) (100) ...	252.50	257.50	245.00	252.
Chem & Fibres (10) ...	24.00	22.50	22.00	22.
Colour-Chem (100) ...	222.50	220.00	210.50	220.
German Remedies (10)	26.00*	26.00	25.50	26.
Gujarat State Fert. (100)	450.00	435.00	424.00	428.
Hindustan Lever (10) ...	45.00	45.00	43.00	44.
Indian Organic (100) ...	345.00cd	340.00xd	330.00xd	335.
National Organic (100)	240.00	242.00	234.00	237.
Pfizer (10)	45.50cd	23.50	23.50	23.
Polyolefins Ind. (100) ...	300.00	295.00	285.00	295.
Sandoz (10)	27.50	27.50	27.50	27.
Synthetics (100) ...	121.25	120.00	115.00	115.
Warner-Hindustan (10)	24.50*	25.00	25.00	25.
Zuari Agro (10)... ...	30.00	27.00	25.00	26.
Miscellaneous				
Bajaj Auto (100)	1,630.00	1,700.00	1,635.00	1,700.
Bombay Oxygen (100)	122.50	120.50	120.00	120.
Cadbury (10)	22.75	21.75	21.75	21.
Camphor & Allied (100)	205.00	212.50	200.00	212.
Ceat Tyres (100) ...	202.50	200.00	197.50	197.
Colgate-Palmolive (10)	150.00	147.00	145.00	147.
Empire Industries (15)	29.00*	—	—	29.
Fibre glass (10) ...	19.50	—	—	19.
Gammon India (10) ...	20.50	—	—	20.
Hindustan Ferodo (10)	42.00*	—	—	42.
Hoechst Dyes (10) ...	27.00	27.00	27.00	27.
Indian Hotels (10) ...	105.00	108.00	100.00	105.
Motor Industries (100)	425.00	490.00	460.00	460
Tata-Finlay (10) ...	14.25	13.75	13.00	13.

Notes : Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—righ

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the colum

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the week under report ** During the week ended July 18, 1981 the bombay stock Exchange remained open for trading only on July 17. The normal trading was on June 26, after which the market was open on July 2 and July 17 for squaring - up of outstanding business.

Market Gossip

Cotton imports?

THERE has been a revival of the proposal to import cotton, particularly in the medium and short staple range, the new Textile Commissioner, Mr R. K. Thakkar, is already reported to have told the Southern India Mills' Association (SIMA) that the Government is considering the proposal made by the Indian Cotton Mills' Federation on the subject. The Federation's original proposal sought the import of one million bales of cotton to make up the anticipated shortfall in stocks during the lean period, even based on the figures computed by the Cotton Advisory Board. The Cotton Corporation of India, with its huge unsold stocks, managed to put forward its view that imports were not necessary and there was enough cotton in the country. In case imports are allowed, the CCI fears that it would have to sell its stocks at lower and lower prices.

Soon the Bombay Millowners' Association came up with the bright idea of going fine and saving on foreign exchange. It said that there could be conservation of cotton use to the extent of five lakh bales. Then, feelers were set out indicating the official stand that a maximum of three to four lakh bales of cotton imports could help the mills tide over the immediate crisis. This was further whittled down to two lakh bales. A delegation of the CCI recently visited the Far Eastern region and is back but the results of the trip are not known. The season is fast coming to a close. Even if cotton suppliers are located, when will the country get the cotton? Imported cotton could reach us when new crop indigenous cottons are entering the market. Of the two, which will the mills prefer?

UPASI ignored

THE United Planters' Association of Southern India (UPASI) is obviously disturbed by the way the Coffee Board has been re-constituted recently. It has complained that the panel of names submitted by the representative growers' association in response to the process of consultation that is statutorily required has been bypassed and considerations other than merit, accountability and representative status have entered into the picture. There is one strong point that UPASI makes. Unlike other commodity boards, the Coffee Board is the sole board charged with the task of marketing the entire produce of coffee growers. What it amounts to, it says, is a surrender of their fundamental rights to carry on their trade or business. This was the reason why in the past producers were not only accorded majority representation on the board but their representative associations too had the right to nominate grower members to the board. UPASI always suggested the names of its representatives on the board after the widest possible internal consideration with the various regional and local associations but the Government has now thought it fit to overlook its considered views in the constitution of the Coffee Board.

Sone Valley: Accountless meeting?

SONE Valley Portland Cement Co Ltd is scheduled to hold its annual general meeting on July 31, but will not present any accounts for the consideration of shareholders. This is because the company, whose last working year has ended on December 1980, has not yet been able to finalise the accounts in view of the labour unrest and lock-out at its plant. With the intervention of the Bihar Government, the company lifted the lock-out on May 22 and its office began functioning from May 26 followed by production on June 8. Because of these circumstances the management of the company had sought permission of the Registrar of Companies to hold its annual general meeting some time in September next, but it was given only one month's extension and accordingly the meeting will now be held on July 31. Since the accounts have not yet been finalised the meeting is expected to be a routine one and likely to be adjourned after considering other items.

Groundnut oil mills paralysed

EVEN in the midst of reports that Gujarat, the principal groundnut producing state in the country, will reap a bumper groundnut crop of 23 lakh tonnes during 1981-82 as against nearly 16 lakh tonnes last year, groundnut oil prices in all the major markets of the country—including Rajkot—were soaring during the first fortnight of July. The announcement of higher allocation of imported edible oils for direct distribution to the consumers for July at 47,000 tonnes as compared with 42,000 tonnes released in June also did not have any salutary impact on prices. The fixation of profit margin on sales of groundnut oil by the Gujarat Government from July 1 has not only not achieved the professed objective of controlling the rise in the prices but has become instrumental in providing a fresh lease to the bullish phase. Following the fixation of profit margin for millers at 0.5 per cent, for wholesalers at one per cent and for retailers at two per cent, the wholesale price of groundnut oil in Rajkot increased by almost Rs 100 per quintal during the first fortnight of July to reach a new record of Rs 1,425. In Bombay market also prices increased by Rs 85 to Rs 1,535 per quintal during the same period. As on July 15, the 15.5-kg tin of groundnut oil in Bombay was quoted at Rs 270. Even in Rajkot it was as high as Rs 260. This was expected to reach a new high of Rs 300 around Diwali (October-end) according to market circles.

The crushing industry in Gujarat, as was feared by the trade sources, has almost come to a grinding halt in that only 5 per cent of the mills were working. According to trade sources, the measure taken by the State Government was impracticable for various reasons. Without any ceiling on the prices of groundnut—the raw material for the oil—how can the profit margin for groundnut oil be fixed? Not only that, the raw nut prices were fluctuating practically every day. Added to this was the fact that in the absence of any such scheme operating in other states, raw nut was likely to be diverted to other states.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*July 13, 1981*	*A week ago*
Groundnut	*(Rajkot)*	538	533
Rapeseed	*(Kanpur)*	538	513
Sesamum	*(Delhi)*	620	653
Castorseed	*(Kanpur)*	318	278
Linseed	*(Kanpur)*	490	490
Sugar	*(Bombay) (a)*	633	658
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	218	218
Aluminium	*(Bombay) (d)*	1,515	1,515
Copper	*(Bombay) (e)*	3,480	3,460
Lead	*(Calcutta) (f)*	1,150	1,140
Zinc	*(Calcutta) (g)*	1,540	1,525
Gold	*(Bombay) (h)*	1,675	NQ
Silver	*(Bombay) (i)*	2,395	NQ
Caustic soda	*(Bombay) (j)*	585	605
Soda ash	*(Bombay) (k)*	238	242

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996, (j) Flakes and (k) Tata NQ—Not Quoted

COMMODITIES

Cotton prices steady

Bombay, July 13

Quietly steady conditions continued to prevail in the spot cotton market during the past week with limited business passing. The progress of the monsoon so far has been noted with satisfaction. The spinners are, by and large, not inclined to extend their commitments, pending a clearer picture about the probable crop assessment for the ensuing season.

The Government of Maharashtra continued to make frantic efforts to convince the Centre about the need for the extension of the monopoly procurement on account of its vital importance to the prosperity of the cotton growers. Indications are that the Government's efforts would result in some positive announcement about the scheme by the Centre before the end of the month.

The Cotton Corporation of India has already initiated a tion to explore the prospec of getting cotton impors fro some of the countries u. t Far East. The quantity cu rently talked about is two lak bales. The textile industr has originally sought an impo of ten lakh bales of short st ple cotton with a view avoiding a critical position regard to stocks in the lea months before the arrival the new crop.

Now that the Governme has accepted the need for pu ting up the retail selling p ces of controlled cloth, indu try circles are hoping that t authorities would also so take a similar decision in r gard to the cheap cloth schem

The cheap cloth scheme wa introduced in September 19 and the maximum retail pri was fixed at Rs 6.36 per metr There has been an all-roun cost escalation, with speci reference to the strident a vance in cotton prices durin the last few months. the circumstances, the mill i dustry is of the view that suitable mark-up in price should be granted if the chea cloth scheme should be cont nued. In the absence of an upward revision in prices, th scheme should be dropped.

The following has been th trend of prices of some of th leading varieties :

(Rs. per candy)

	July 10	July 3
Digvijay	5,050-5,150	5,050-5,15
Kalyan	4,750-4,850	4,750-4,85
Saurashtra CO2	4,850-5,000	4,850-5,0
Shankar 4	5,850.6,150	5,850-6,20
Maharashtra H 4	5,400-5,550	5,400-5,55
MP H4	5,300-5,450	5,250-5,40
MP Y1	4,900-5,000	4,900-5,00
MP 1007	5,150-5,250	5,150-5,25
MP A 51/9	5,100-5,200	5,050-5,15
MCU 5 Guntur	5,900-6,100	5,800-6,05

Downtrend in yarn

Bombay, July 1

A steady and downwar trend was noticed in the loca yarn market during the pas week. While the prices 120D NRC and 120D CR de lined by Rs 1.65 and Rs 1.3 to Rs 52.31 and Rs 52.60 res pectively, the prices of 150 NRC, 150D CR, 100D SIV an 150D acetate remained stead at Rs 51.21, Rs 50.66 Rs 55.0 and Rs 41.85 respectively.

Groundnut oil scales new peak

Bombay, July

Groundnut oil price scaled fresh peak at Rs 153.92 per 1 kg during the past week o encouraging advices from pr ducing centres and limited a

ESCORTS LIMITED

NOTICE

It is hereby notified for the information of the public that ESCORTS LIMITED proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval of the establishment of a new undertaking by setting up a Floating Dock to carry on the business of repairing and servicing of ships upto 25,000 DWT. Other particulars of the proposed new undertaking are as under :—

(i) Name of the proposed undertaking : The proposed undertaking will be a Division of Escorts Limited.

(ii) Name(s) of the persons or authority/authorities proposing to establish new undertaking : ESCORTS LIMITED

(a) Management structure of the applicant undertaking : The Board of Directors of the applicant undertaking companies of:

Mr. H. P. Nanda, Chairman and Managing Director.
Mr. Rajan Nanda, Vice-Chairman and Joint Managing Director.
Mr. C. K. Hazari, Joint Managing Director.
Dr. Bharat Ram.
Mr. D. N. Davar Nominee, Industrial Finance Corporation of India.
Mr. S. Bhoothalingam.
Mr. J. M. Shrinagesh.
Sodhi Kartar Singh.
Mr. S. N. Bilgrami.
Prof. Ravi John Matthai
Mr. S. Ranganathan.
Field Marshal Sam Manekshaw.
Mr. Parmeshwar Sahai.
Mr. Anil Nanda.
Mr. S. Hariharan.

(b) Management structure of the proposed undertaking : Same as the applicant undertaking.

(iii) Capital Structure—

(a) The Applicant undertaking

(Rs. in lakhs)

Authorised Capital	2,000.00
Issued Capital	1,420.72
Subscribed and paid-up capital ..	1,418.41

(b) The proposed undertaking : Same as the applicant undertaking.

(iv) Proposed location of the new undertaking : In the State of Maharashtra.

(v) Brief outline of the cost of Project, the Scheme and source of finance : It is proposed to purchase a Secondhand Floating Dock capable of taking ships upto 25,000 DWT.

The estimated cost of the project would be Rs. 1,750 lacs which is proposed to be financed from loans from Indian/Foreign financial institutions and from Company's internal accruals.

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, under advice to the Company, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

For ESCORTS LIMITED
CHARANJIT SINGH
Vice-President and Secretary

Dated : 13th July, 1981.

Registered Office :
H-2, Connaught Circus,
New Delhi-110 001

rivals in the oilseeds market during the past week. The price, however, reacted feebly to Rs 152.88 on the concluding day of the week mainly because buyers were reluctant to lift stocks at higher prices. During the past two weeks, the net gain was Rs 16.13 per 10 kg, including 4 per cent sales tax.

Groundnut also hardened further. Karad bold and Saurashtra bold improved markedly by Rs 32 each to Rs 624 and 629 per 100 kg, while Saurashtra quality firmed up by Rs 31 to Rs 633 per 100 kg.

Imported oils also flared up in view of the firmness in groundnut oil. Besides, reluctance on the part of STC to deliver any stocks through fair price shops on ration cards also pushed up the prices. The stocks with private parties were limited and as a result prices flared up. Soyabean spurted by Rs 7.52 to Rs 143.52 and RBD by Rs 4.80 to Rs 121.80 per 10 kg. Palmoleine was, however, marginally lower by Rs 1.48 at Rs 143.52 on moderate business.

Castorseed and oils ruled quietly steady. Madras small rose by Rs 12.50 to Rs 324.50 and Kanpur bold by Rs 14 to Rs 316 per 100 kg, including 4 per cent sales tax. In the previous week, castorseed had not attracted sales tax, while in all the other cases sales tax is in force with effect from the previous week. Castor commercial oil lost 65 paise at Rs 68 and BSS oil 25 paise at Rs 73.25 per 10 kg because export demand was poor.

Linseed rallied on encouraging advices from the north. Linseed bold went up by Rs 18 to Rs 478 per 100 kg and its oil by Rs 1.70 to Rs 121.70 per 10 kg.

Activity in cakes was limited. Export inquiries were poor with the result prices were, by and large, steady.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :—

	11-7-1981	4-7-1981
G. nut		
Karad bold	624.00	592.00
G. nut oil	152.88	145.75
Cast. Md. Sm.	324.50	312.00
Cast. oil com.	68.00	68.65
Cast. oil BSS	73.25	73.50
Linseed bold	478.00	460.00
Linseed oil	121.70	120.00

Grains improve

Bombay, July 13

Barring a fall in masoor dal, cereals, coarse-grains and pulses ruled steady to firm during the past week.

Among cereals, wheat recorded a further rise on limited supplies and good retail demand. Sellers were reserved. Saurashtra variety of wheat was in demand Rs 8 higher at Rs 215-238 per quintal. Supplies from Gujarat were hampered by heavy rains. Superior variety improved by Rs 3 to Rs 295-330. The announcement of the import of 1.5 million tonnes of wheat had little impact on prices.

Rice ruled steady. Basmati variety was traded at Rs 450-600 per quintal. Surti kolam was sold at Rs 340-400 per quintal.

Activity was limited in coarse grains. The undertone was steady to better because of poor supplies and limited stocks. The price of coarse grains persisted at previous week's level. Jowar fetched Rs 185-225 per quintal. Bajra was offered at Rs 165-230 per quintal. Maize ruled at Rs 155-160 per quintal.

Among pulses, gram recorded a further rise on poor arrivals and encouraging advices from up country centres. Sellers were reserved. Gram gained Rs 17 to Rs 400-410 per quintal on good demand. Masoor dal receded on slack demand. Sellers were keen.

The undertone was hesitant. The price of masoor dal suffered a setback of Rs 10 to Rs 490-495. per quintal. Moong (chumki) flared up by Rs 10 to Rs 425-450 per quintal on brisk demand and paucity of supplies. Urad (Khandesh) and tur dal lacked fresh support and ruled steady at Rs 320-325 per quintal and Rs 485-575 per quintal respectively.

NOTICE

THE ASSOCIATED CEMENT COMPANIES LIMITED

(Registered Office : Cement House, 121, Maharshi Karve Road, Bombay-400 020)

(General Notice under the Monopolies and Restrictive Trade Practices Act, 1969)

1. It is hereby notified for the information of the public that THE ASSOCIATED CEMENT COMPANIES LIMITED proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (1) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion for the manufacture of Portland Cement at its Sevalia Works in the State of Gujarat. Brief particulars of the proposal are as under :

(i) Name(s) of Person(s)/body corporate owning the undertaking : The Associated Cement Companies Limited,
Cement House,
121, Maharshi Karve Road, Bombay-400 020.

(ii) Capital structure of the applicant undertaking (as on 31st July, 1980) :

(a) **Authorised Capital**

40,00,000	Equity Shares of Rs. 100/- each	Rs. 40,00,00,000
10,00,000	Unclassified Shares of Rs. 100/- each	Rs. 10,00,00,000

(b) **Issued Capital**

33,25,121	Equity Shares of Rs. 100/- each	Rs. 33,25,12,100

(c) **Subscribed Capital**

6,07,264	Equity Shares of Rs. 100/- each issued as fully paid for consideration other than cash pursuant to contracts	Rs. 6,07,26,400
15,63,588	Equity Shares of Rs. 100/- each issued for payment in cash	Rs. 15,63,58,800
11,52,265	Equity Shares of Rs. 100/- each issued as fully paid by way of bonus shares	Rs. 11,52,26,500
		Rs. 33,23,11,700

(iii) Details of the proposed substantial expansion :

(a) Names of new goods to be produced, supplied, controlled, or distributed or of new services to be rendered : Not applicable

(b) In case of substantial expansion of existing activities :

(i) Name of the goods : Portland Cement

(ii) Capacity before expansion : 74.84 lakh tonnes per annum (LTPA) as at 31-7-1980 (of the body corporate owning the undertaking which includes 2.03 LTPA installed capacity in respect of it Sevalia Works).

(iii) Expansion proposed : 0.80 LTPA

(iv) Location of the Project :
Tehsil : Thasra
District : Kaira
State : Gujarat

(v) Brief outline of the cost of the project, the scheme and sources of finance : Cost of the project Rs. 82.03 lakhs

The Scheme and Sources of Finance : It is proposed to finance the expenditure partly from internal resources and partly by availing of soft loan from financial institutions.

2. Any person interested in the matter may make a representation of the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

For THE ASSOCIATED CEMENT COMPANIES LIMITED
T. V. BALAN
Director

Dated this Thirteenth day of July, 1981.

FORM IA

(See Rule 4A (I))

Kirloskar Cummins Limited—Regd. Office—Kothrud, Pune 411 029

NOTICE

It is hereby notified for the information of the public that Kirloskar Cummins Limited proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (1) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities.

Brief particulars of the proposal are as under :—

(i) Name(s) of person(s)/Body Corporate owning the undertaking	KIRLOSKAR CUMMINS LTD	
		Rs.
(ii) Capital structure of the applicant undertaking	Authorised	100,000,000
	Issued and subscribed	66,000,000 (Equity) 7,000,000 (Preference)
(iii) Details of the proposed substantial expansion		
(a) Names of new goods to be produced, supplied, controlled or distributed or of new services to be rendered.	Commercial Vehicles (above 3 tonnes) 15,000 Nos. per annum.	
(b) In the case of substantial expansion of existing activities		
(i) Name of goods (ii) Capacity before expansion (iii) Expansion proposed	Not applicable.	
(iv) Location of the project for substantial expansion	Backward area of :— (i) District Satara—Maharashtra (ii) District Medak—Andhra Pradesh	
(v) Brief outline of the cost of the scheme and sources of of finance	The cost of the project is Rs. 110.95 million, out of which foreign exchange component for purchase of machinery will be Rs. 56.65 million which will be negotiated through Financial Institutions. The indigenous machinery components will be of Rs. 44.30 milion which will be arranged through Bank facilities and I.D.B.I. Balance of requirement will come from Company's own resources and public deposits. The Company proposes to reach production level of 15,000 Commercial Vehicles p.a. within 6 years.	

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi. within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

FOR KIRLOSKAR CUMMINS LIMITED

Sd/-
(M.A.BAKRE)
Vice President-Secretary.

Dated: 15.7.1981.

Sugar hesitant

Bombay, July 13

The price of sugar C-30 grade moved down marginally as keen unloading despite restricted arrivals lowered the price by one rupee to Rs 650-660 per quintal. The undertone was hesitant. Upcountry demand was weak. Activity in the local market was moderate. The price of sugar C-30 as on July 11, 1981 was lower by Rs 102 per quintal than on the corresponding date a year ago. The State sugar factories lowered their quotations to Rs 610-613 per quintal. The wholesale market received 19,847 bags and disposed of 20,000 bags. The weekend stocks amounted to 2,290 bags compared to 2,443 bags at the previous week end.

Khandsari was quoted at Rs 550-600 per quintal. The market received 252 bags sold 555 bags during the week. At the end of the week stocks with the dealers dwindled to 472 bags from 775 bags at the previous week end.

TAX PAYERS !

SECURE PROMPT CREDIT FOR YOUR INCOME TAX PAYMENTS

The Income-tax Officer gives you credit for your tax payment on the basis of the counter-foil of the challan received from the authorised bank where you make the payment.

Surely, you would like your tax payments to be credited to your account in the records of the I.T.O. promptly and fully.

THEN CHOOSE THE APPROPRIATE CHALLAN FORM FOR EACH PAYMENT

There are separate challan forms for the various types of income-tax payments. These are :

For payment of	*No. of challan*	*Colour of the band on challan form*
Advance Tax		
By companies	1 (ITNS 35A)	Red
By others	7 (ITNS 35)	Blue
Self-Assessment Tax		
By companies	3 (ITNS 166)	Red
By others	11 (ITNS 166A)	Blue
Tax Deducted at source		
From salaries	9 (ITNS 191)	Blue
From other payments		
Made to companies	2 (ITNS 39A)	Red
Made to others	8 (ITNS 39)	Blue

THE NUMBER OF CHALLAN IS INDICATED ON THE TOP LEFT HAND CORNER.

For payment of tax due on regular assessment, the appropriate challan will be supplied to you by the income-tax Officer.

Use of a wrong challan may result in misclassification and consquent difficulty in giving prompt credit for the tax payment.

FILL THE CHALLAN FORM COMPLETELY AND CORRECTLY

And make sure you write legibly on all foils of the challan :

- Your name and address
- I.T.O.'s Wards or Circle where you are assessed or assessable. In case you are a new assessee, mention "NEW CASE" also on the top of each foil of the challan.
- The amount of income-tax and surcharge separately.
- Your Permanent Account Number/GIR Number.
- Assessment Year.

A mistake or omission may result in undue delay in giving credit to you for your tax payment.

Correct entries in the Department's Books are as important as prompt payment of taxes. Take due care to ensure both.

PAY TAXES RIGHT
BUILD NATION'S MIGHT

DIRECTOR OF INSPECTION
(Research, Statistics, Printing & Public Relations)
INCOME TAX DEPARTMENT
New Delhi-110001

davp/81/65

Gold subdued, silver erratic

Bombay, July 13

A subdued tendency in gold and an erratic trend in silver marked trading in the Bombay bullion market during the past week.

Standard mint gold opened at Rs 1,645 per 10 gms and closed at the same level. Silver (.999 fineness) opened at Rs 2,350 per kg and dropped to Rs 2,320 per kg on the same day. It, however, firmed up subsequently to close at Rs 2,405 per kg.

Money comfortable

Bombay, July 13

Conditions in the Bombay short-term money market continued to be comfortable during the past week. Interest rates for both notified and commercial funds opened at 9 per cent and dropped to as low as 3 per cent on Friday (July 10). The rates, however, firmed up on the last day to close at 7 per cent

Aggregate deposits cross Rs 40,000-crore mark

Bombay, July 13

With an increase of Rs 241.49 crores during the week ended July 3, 1981, aggregate deposits of all scheduled commercial banks crossed the Rs 40,000-crore mark to reach Rs 40,168.73 crores. Bank credit expanded sharply by Rs 261.72 crores to Rs 26,555.78 crores. While the balances of banks with the RBI declined by Rs 119.03 crores to Rs 4,397.79 crores, their borrowings from the RBI went up by Rs 5.78 crores to Rs 570.04 crore.

NOTICE

THE GWALIOR RAYON SILK MFG. (WVG.) CO. LIMITED

Registered Office:

BIRLAGRAM, NAGDA (M.P.)

Notice is hereby given that the Registers of Members and Transfer Books of the Equity and Preference Shares Series 'A' and 'C' will remain closed from Tuesday, the 11th August, 1981 to Monday, the 7th September, 1981 (both days inclusive) for the purposes of payment of dividend on 1,78,40,000 Equity Shares and 1,48,275 Preference Shares Series 'A' and 2,00,000 Preference Shares Series 'C' in the Company.

The dividend on Equity and Preference Shares Series 'A' and 'C' when sanctioned by the Shareholders will be made payable to those Shareholders, whose names stand on the Registers of Members of the Company as on 7th September, 1981 as under:

(i) Dividend on Preference Shares Series 'A' and 'C' on or after 5th October, 1981.

(ii) Dividend on Equity Shares on or after 10th October, 1981.

By Order of the Board
D. N. MAKHARIA
Secretary

Birlagram, Nagda,
Dated: 18th July, 1981.

TATA CHEMICALS LIMITED
NOTICE
FORM I-A

It is hereby notified for the information of the public that TATA CHEMICALS LIMITED propose to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (1) of Section 21 of the Monopolies & Restrictive Trade Practices Act, 1969, for substantial expansion of its shipping activities. Brief particulars of the proposal are as under:–

(i) Name(s) of person(s) / body corporate owning the unertaknig:
TATA CHEMICALS LIMITED

(ii) Capital Structure of the applicant undertaking:

Authorised Capital	..	Rs. 15.00 Crores
Issued/Subscribed Capital	..	Rs. 9.94 Crores.

(iii) Details of the proposed substantial expansion:

(a) Names of new goods to be produced, supplied, controlled or distributed or of new services to be rendered:
Not applicable.

(b) In the case of substantial expansion of existing activities:

(i) Names of Goods:
Acquisition of about 120,000 DWT of shipping tonnage comprising Dry Cargo Bulk Carriers and/or Product Tankers.

(ii) Capacity before expansion:
21,548 DWT.

(iii) Expansion proposed:
A total of 120,000 DWT of shipping tonnage comprising of Dry Cargo Bulk Carriers and/or Product Tankers

(iv) Location of the project for substantial expansion:
Not applicable.

(v) Brief outline of the cost of the project, the scheme and sources of finance.
COST OF THE PROJECT—Approx. Rs. 75 Crores

SOURCE OF FINANCE

Deferred Credit —Approx.	Rs. 60 Crores.
Internally generated funds....	Rs. 15 Crores.
	Rs. 75 Crores

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this **15th** day of July, 1981.

Registered Office:
Bombay House,
24 Homi Mody Street,
Fort, Bombay 400023.

For and on behalf of Tata Chemicals Ltd.
by their Constituted Attorney
H.P BARIA

A journey to Himachal

Concluded from page 200

commentary, cold drinks, tourist literature that would make a bus journey very enjoyable.

The State is famous for apples, pears, peaches and some other summer fruits. The mainstay however is apple. It is believed that Kulu apples are far more delicious and nutritious than the varieties grown in Kashmir. The fruit research station near Mashobra has about 145 varieties under study and promotion. On enquiries with small-orchard owners, however, they were not fully aware of the services available with the horticulture department or the research station and they are content with ordinary varieties with a limited shelf life, and whatever prices the middlemen offer! The growers could certainly get far more for their produce if there were a chain of co-operatives running finance, cold-storage, transport and marketing facilities. I am waiting for the day when these fresh apples would be flown directly from the Kulu airport to state capitals in Europe, where Israel seems to have a monopoly of supplies of flowers, fruits and vegetables.

Flowers offer almost unlimited scope in the hospitable environs of Himachal. It needs the co-ordinated efforts of all concerned to make it bloom.

The valleys of Himachal Pradesh offer countless attractive spots for skiing, inns, trekking, fishing, camping, lodges, cable-car journeys, transportation etc. You name it—they have it.

When would the 'Hanuman' know about his own prowess?

Beyond headlines

A journey to Himachal

By N. K. SOMANI

TRAVEL in India is a horrendous exercise by itself, especially if you are planning about a month's vacation in the summer with your family. We had started to think about our May vacation way ahead in early March. (Sept-Oct is far more suitable for leave and travel, but our educational system does not permit children to avail of that period). This year, our hearts were set to explore Himachal Pradesh which is truly renowned for its majestic natural splendour. With the mighty Vyas, Ravi Chenab etc flowing through a large part of the State and with several perenially snow-clad ranges rising above the Himalayan clouds, the area is fairly dotted with coniferous woods and could be truly developed better than Switzerland. This, alas, is yet not to be.

Tourism in our country has unfortunately been pushed into a third-rank ministry—both in terms of the ministerial appointments and annual allocations from the Central Government over a long period of time. Even if the whole country cannot be developed overnight for domestic and foreign tourists the Himalayan belt (with due apology to George Fernandes who is reported to have expressed an opinion that the country should be closed to foreign tourists for the next ten years!) provides at once a God-created opportunity. This magnificient, almost unbroken chain of natural splendour from Kashmir to Darjeeling at an average altitude of 1500-3000 metres, is already a victim of human indifference and cruelty—both in terms of its abject neglect and the systematic destruction of forests in the belt. I was sorely depressed by the unrelieved sight of brutally cut and murdered trees, whose mute stumps bore enough testimony to our lip sympathy to grow more trees and the 'Chipko Andolan'. The average age of the trees, as per local information, was 30-100 years and the signs of looking after or adding were very few, if any.

I have always wondered as to why Himachal cannot make tourism, fruits and flowers and forestry produce as its mainstay. From what little I saw in 23 days' sojourn in various parts of the State, I was emboldened to offer to two senior government officers of Himachal Pradesh that any prvate individual like me, can make Himachal the richest State in the country in 10 years if he were given adequate authority! They 'encouraged' me by saying that I should make appropriate noises in Delhi and Simla, with the appropriate governments!

To come back to the beginning. It took me three weeks of cajoling and reminders to obtain badly produced, out-of-date, poorly cyclostyled information sheets from the Delhi office of Himachal Pradesh Tourism. Our request for accommodation (not at Simla) at Wildflower Hall (a charming hillock near Kufri) in a family cottage for 12 days and a similar spell at Manali was telegraphically requested in early April. We also wanted six first class tickets by railway leaving Delhi on April 30 for Kalka. Up to the day of departure, only four tickets were confirmed and a representative had to spend the best part of a hot four hour afternoon at Delhi station to get the other two! About accommodation, I sent (reply-paid) telegrams to Himachal Pradesh Tourism, Delhi, their head office at Simla and the area managers at Kulu for these cottages. This was followed by personal visits at Delhi and letters to Kulu and Simla. Inspite of incessant follow-ups, all the assurance we got was two days in the hotel complex at Wildflower Hall (not the cottage complex) and two days at Hotel Beas at Manali (again no cottages!). We were keen on our cottages since we are vegetarians and had planned to take our cook-cum-handyman with us. One can only stomach outside food only for a few days.

Undaunted by sketchy response, we booked our seats on Indian Airlines for Delhi (taking advantage of the newly announced and imaginative LTC concession fares for the two of us and the four children—not all mine—travelling at student concession rates). Almost two hours on this day were, however, wasted in collecting a few thousand rupees' worth of travellers cheques from one of the nearby Stat Bank branches. I had sent two assistants in advance with cash to ensur that I would not be detained for lon on my day of departure. However, i seems banks always do a great deal o favour while dealing with anyone o any matter!

The journey to Simla was uneventful. Simla appeared as a mini Connaught Place at most times, the entir fashionable lot of tourists being perpetually on the Mall and the Ridge We were fortunate to be given a famil cottage, after a wait of two days—a event that was not to be confirmed into reality until we landed.

Wildflower Hall—as the name suggests—is situated amongst countles flowers, largely white and yellow an several smaller ones. The view fro this hamlet is breath-taking (when th skies allow), since you can clearly se several peaks including Badrinath fro the garden cafe of the hotel and fro many other points. The summer retreat of the President of India is almos next door.

Although the place, Wildflowe Hall is so exquisitely situated, the service, cleanliness and maintenance i far from desirable. The hot-wate geysers in our two cottages broke dow several times. It occupies a very larg estate, but during power failures, ther are no emergency lights. Small improvements like these will go a lon way to make the place first rate.

Public toilets in India are the mos difficult items to maintain. This ha always been beyond my understandin as to why we can never conquer thi 'super-technology' to provide an maintain clean toilets. First of all, the are very few and even they are totall unusable. Himachal toilets are no exception. In every single public toile that one was forced to enter, one ha to come out nauseated and angry b the floating beauty and clogged pipes

Himachal truck and bus driver take their lessons from the tough Punjabi neighbours next door. I believ the rate of accidents in this State i quite high, but police and transpor authorities seem to be blissfully oblivious of all this. The fleet of buses i indeed in a pitiable condition. So muc for the tourist lip-service! A little mor attention could provide lovely smal tourist buses with music, recorde

Continued on page 19

Mr Somani is a leading industrialist.

COMMERCE

Vol. 143 AUGUST 1, 1981 No. 3659

EDITOR: VADILAL DAGLI
ASSOCIATE EDITORS: D. B. MAHATME
SUBHASH CHANDRA SARKER

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PEOPLE

Modi

Mr B. K. Verma has been appointed group executive of the State Trading Corporation of India, New Delhi.

Mr D. Ramanujam has been elected president of the South India Film Chamber of Commerce.

Mr Surender Nath has been elected president of the Federation of Automobile Dealers Association.

Mr V. K. Modi has been re-elected president of the All India Rubber Industries Association for the ensuing year.

Mr A. C. Muthia has been elected president of the South India Sugar Mills Association.

Tandon

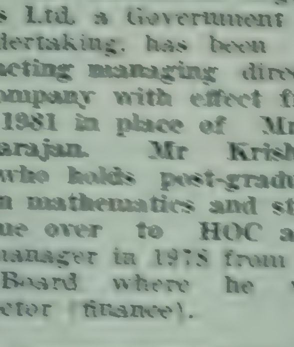
Mr V. C. Tandon, deputy general manager (public relations), Bharat Heavy Electricals Ltd, a Government of India undertaking, has been re-elected chairman of the Public Relations Society of India (Delhi chapter) for the second consecutive term. Mr V. S. Chopra was elected vice-chairman, Miss Anita Takru secretary and Mr M. R. S. Mani treasurer.

Krishnamurthy

Mr H. Krishnamurthy, director (finance) of Hindustan Organic Chemicals Ltd, a Government of India undertaking, has been appointed acting managing director of the company with effect from July 23, 1981 in place of Mr P. N. Devarajan. Mr Krishnamurthy, who holds post-graduate degrees in mathematics and statistics, came over to HOC as a general manager in 1978 from the Railway Board where he was joint director (finance).

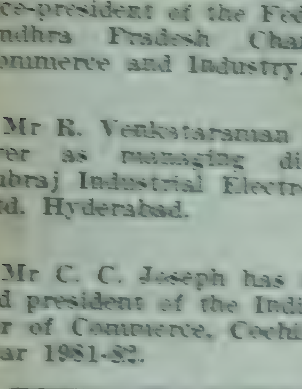
Mr. R. N. Jalan has been elected vice-president of the Federation of Andhra Pradesh Chambers of Commerce and Industry.

Mr R. Venkataraman has taken over as managing director of Subraj Industrial Electronics (P) Ltd, Hyderabad.



Joseph

Mr C. C. Joseph has been elected president of the Indian Chamber of Commerce, Cochin, for the year 1981-82.



Sarwal

Dr Vasant Pethe, an internationally reputed demographer-economist, has joined as professor and director of the Nehru Institute of Social Studies, Pune.

Dr K. P. Parameshwaran has taken over as managing director of Orissa Industrial and Technical Consultancy Organisation Ltd.

Mr Karan B. Sarwal of Thomas Cook (India) Ltd, Bombay, has been re-elected president of the Air Cargo Agents Association of India.

THE WEEK

Under an ordinance promulgated on M the Union Government armed itself with powers to ban strikes in a number of services industries, including those in private sector, it considers or may consider as essential. (See edit, special reports and document).

The Madhya Pradesh Government has shed the 50 per cent levy on the sale or wheat by traders within the State. The levy wheat for sale outside the State, however, remains.

Import of vegetable fats has been through the State Trading Corporation, while of art and chrome paper and board have decanalised.

By an ordinance issued on July 26 the Gov ment has raised the effective customs duty on port of edible oils to 150 per cent ad valorem. Government had earlier raised import duty on types of vegetable oils.

Iraq has found the Donimalai iron ore not be of the quality it desires and, therefore, has tur ed down India's request for funds for setting up pelletisation plant. India had offered to pay the help in the form of pellets.

The Federation of Indian Chambers of Co merce and Industry has submitted an export plan the Union Commerce Ministry aiming at 22.85 p cent increase in exports to Rs 8,600 crores du 1981-82. This target is Rs 200 crores more than recently announced official target of Rs 8,400 cro Of the 1981-82 exports, sugar is expected to accou for Rs 150 crores, according to the FICCI plan.

The monopoly cotton procurement scheme the Maharashtra Government will be revive shortly with certain modifications desired by th Union Government. According to the Chief Mi ster, Mr A. R. Antulay, the modalities of the ne scheme will be worked out on August 2.

The Department of Electronics of the Cent Government has invited a West German mul national to manufacture computers in India, it reported.

The selling prices of imported standard new print have been raised by Rs 480 per tonne wi effect from July 1 last.

Wholesale price index

At 279.5, the latest available wholesale pric index for the week ended July 4, 1981 showed a ris of 0.1 per cent over the preceding week and 10. per cent over the year.

Money comfortable

Conditions were more or less comfortable in th Bombay short-term money market as of Monda (July 20). Both notified and commercial fund were renewed at eight per cent. Fresh money wa also transacted at eight per cent. The rates close at seven per cent.

COMMERCE

Wages of labour irresponsibility

THE assumption of power by the Central Government to prohibit strikes in any essential services and to hold summary trial for offences militating against the ordinance could yield dividend if it was used with full understanding of the problems involved. The essential services specified in the ordinance include the railways, posts and telegraphs, telephones, ports, aerodromes, airports, banking, production and refining of petroleum, supply and distribution of petroleum products, public conservancy and sanitation, hospitals under the Central Government and defence undertakings as well as the 42 industries in the public and private sectors listed in the scheduled category of the Industries Development and Regulation Act. The Government can declare as essential any service connected with the matters in which Parliament can make laws. The order banning strikes, when issued, would be valid for six months and can be extended further to a period of not more than six months. Once an order banning strike has been issued, any person violating the same is liable to be punished with imprisonment, besides being subjected to disciplinary action including dismissal. The offences under the ordinance would be cognisable and trials would be conducted summarily. The ordinance, embodied as an act of Parliament, would remain valid for three years. It is reassuring that the Prime Minister, Mrs Gandhi, herself has clarified that there might not be any need to extend the tenure of the measure beyond six months.

No doubt these are draconian measures involving infringement of fundamental rights of citizens. Nevertheless, considering the strategic importance of the subjects listed under essential services, governmental action preventing unwarranted disruption in such services has to be lent support. An unfortunate trend in the public sector organisations, many of which are covered by the ordinance, has been their virtual abjuration of responsibility to the public. The way some employees of the Reserve Bank of India had kept its working paralysed for weeks together recently had nothing to do with trade unionism. Even state governments have been made to complain against the Reserve Bank on that account. Yet, could the demand for employing the children of employees as a matter of routine, which was the principal demand of these employees, be termed part of any reasonable trade union action? Can an organisation like the Reserve Bank of India ever agree to such a preposterous stipulation? Yet this was not by any means the sole instance of irresponsible labour action. Indeed it has almost become customary for many of them to disrupt without notice services in the airlines, railways, ports, banks, insurance companies and elsewhere, putting thousands, nay millions, of people in jeopardy one way or the other. No nation can grow if persons working in the strategic sector conduct themselves with such low sense of responsibility. Unfortunately the trade union leadership has failed to display the capacity to control such indiscipline and has in many cases become part of it.

The exercise of powers by the Central Government under the ordinance would be supportable because such action is expected to remove the blockade to democratic functioning brought about by irresponsible disruption of necessary work. The very interest of democratic functioning would, however, require the Government also to act in a democratic manner in implementing the ordinance. The provision that a police officer can arrest without warrant any person even suspected of having committed an offence is thoroughly repugnant to the principle of democracy and natural justice. As it is, the citizens are over-exposed to police harassment and there is not room for adding to the harassment through any legislation. While placing the ordinance before Parliament for its consideration, the Government, it is hoped, would be looking into this aspect of the ordinance and remove this obnoxious provision. The Government has, by providing a time limit of six months for the validity of its order, given evidence of its awareness of the fact that a ban on strike, when imposed, cannot go on indefinitely. There should not be any need for any further extension of such an order. The period of six months should provide ample opportunity to all the parties concerned to sort out the problems and the provision for extension should be dropped. Similarly, the validity of the law incorporating the ordinance, which arms the Government with virtual emergency powers, should be restricted to one year instead of the suggested life of three years. It would be clearly inadvisable to allow a legislation, which provides for summary trial procedure, to remain on the statute book for a longer period.

Any assumption that disruption in economic activity comes only out of the indiscipline of the workers is totally invalid. During 1980 the number of mandays lost on account of lockouts was 5,904,000 compared with 7,007,000 mandays lost on account of strikes. Thus no realistic policy can ignore the threat of lockouts. The function of uninterrupted production calls for co-operation from all quarters. If the impression gains ground that the Government, while punishing the less privileged for breaches committed by them, is interested in overlooking the offences of the more powerful and richer sections of society, the all-round co-operation, which is an essential pre-condition for growth, will not be forthcoming and the very objective of promulgating the ordinance would be vitiated. The Prime Minister has done well, therefore, to make it clear that lay-offs and lockouts come under the purview of the ordinance. This is both just and sensible and the Government should make clear its intention in the bill that it proposes to bring before Parliament. If strikes are banned, lay-offs and particularly lockouts should also be banned.

There has been predictable reaction to the ordinance. While labour leaders have unequivocally condemned it, business leaders have welcomed it. It is conceded that the need for such an ordinance arose because of the widespread sense of irresponsibility of some trade unions who put their own interests before the interest of the mass of citizens of India. The ordinance should awaken the social conscience of trade unions. After all it is before the tribunal of the people that they must place their case and here an outright condemnation of the government measure would only weaken their position. This is so because, whether they like it or not, the fact remains that this measure has been most enthusiastically welcomed by the common man who is needlessly harassed by all manner of industrial actions at bank branches, insurance offices, airports and other places providing essential services.

The trade unions should realise that they cannot further the interests of workers with the public opinion hostile to them for which they should thank themselves. Business and industry leaders should have also suggested certain steps that their community could take to avoid industrial tensions. The all-pervasive social irresponsibility in the field of industrial relations is the root cause of the impasse which led to this ordinance. But such a drastic measure could at best be a palliative. Trade unions themselves should suggest new norms of industrial behaviour which would keep the government out of collective bargaining. If the trade unions do not show a new sense of social responsibility, they will make themselves increasingly irrelevant to the evolution of a just society in India.

Another point that will naturally strike the public mind in this context is the absence of cabinet rank ministers exclusively devoted to the task of promoting industrial development as also of labour. The possibility that the present predicament could have been avoided to a great extent if timely and proper attention had been given to the matter at the highest political level cannot be dismissed altogether. If the Government has found the situation so grave as to be compelled to arm itself with extraordinary powers to deal with the same, is it unreasonable to expect that there ought to be a minister of cabinet rank to deal with the subject of industrial development and a separate minister for labour which is tagged to some other economic ministry?

Ottawa summit or Reagan summit?

THE recent Ottawa summit of seven rich nations of the world—the United States, Japan, West Germany, France, Britain, Canada and Italy—failed to reach even a superficial understanding about common economic policies of the Atlantic Alliance. Despite the host country Canada's efforts to evolve a minimum consensus, leaders of non-communist industrialised countries left Ottawa without giving any quarter to their colleagues' differing views. Two major developments have taken place since the last year's Venice summit meeting—the election of the ultra-conservative Ronald Reagan as the President of the United States and the victory of the Socialist leader, Francois Mitterrand, as President in France whose ideas have emerged as an alternative to anti-Third World Reaganism.

America's partners were worried about three problems: (a) High interest rates in the United States which led to interest rate war which, in turn, led to recessionary conditions and mass unemployment in Europe. (b) America's aggressive attitude towards the Soviet Union. This has started again a cold war which has frightened the Europeans. (c) Total unconcern of Americans about the plight of the Third World which France and Canada thought was short-sighted and not in the ultimate interests of the rich world.

President Reagan has set before himself the paramount aim of fighting inflation through monetary measures. That is why he has raised the interest rates to such dizzy heights that the prime lending rates in the country are 20½ per cent. The inflation rate in the United States is about 10 per cent, but the Reagan Administration refuses to bring down the interest rates. This has affected European economies which are financially integrated with the United States. European leaders complained at Ottawa about the impact of US interest rates on their economies. Mr Mitterrand warned that as a result of high interest rates in the United States, France had to raise the prime lending rate above 20 per cent and Italy to 23 per cent. This has created recessionary conditions and more unemployment. The American policy of interest rates would bring on new social unrest, Mr Mitterrand warned. Mr Reagan promised that by the end of the year the United States interest rates may slightly be brought down. But Europeans feel that when their own interests are concerned, Americans just do not care for the economies of their partners. The exasperation of Europeans was expressed by Mr Gaston Thorn, President of the European Common Market, who turned to the US Treasury Secretary, Mr Donald Reagan, and observed: "Hurry it up, will you; we cannot wait too long". Only Mrs Margaret Thatcher who has created a record unemployment in England by pursuing the Reaganite monetary policy kept quiet but Mrs Thatcher is discredited by economic chaos in the United Kingdom.

The final comunique of the Ottawa summit declared that they were fighting both inflation and unemployment at the same time. This was a hoax. You cannot fight inflation and unemployment at the same time. What happened was that the views of both Americans and Europeans were accommodated in this meaningless statement.

The Europeans were also quite upset about the US posture towards the Soviet Union. The US wanted to adopt a hard line towards the Soviet Union. The West German Chancellor, Herr Schmidt, appealed to the United States to start a dialogue at all levels with the Soviet Union. As regards European trade with the Soviet Union, Mr Reagan pointed out that the US policy had changed fundamentally with his election. Herr Schmidt retorted that it was not possible to change the direction of a convoy just because the captain of one ship had been replaced.

The same difference of approach was visible in regard to the Third World. Mr Reagan is uncompromisingly anti-Third World. He was unashamedly for the rich, both in the United States and abroad. Mr Mitterrand, who wants to open a dialogue with the Third World, could not make any headway because Americans do not want any meaningful North-South dialogue. They have no desire to transfer real resources from the rich to the poor world. So in every sense the Ottawa summit was not the summit of industrial countries of the western world, but the Reagan summit. The reactionary economic policies of Reagan prevailed. Europeans protested, but they are so dependent on the Americans that they could not make their protest effective.

Floods: A hardy annual

THOUGH the south-west monsoon is not yet half way through, floods have been reported from various parts of the country, particularly the northern and eastern regions. During the current monsoon floods are reported to have caused heavy damage in Assam, Bihar, Uttar Pradesh and Rajasthan. To a smaller extent Kerala, West Bengal, Madhya Pradesh, Gujarat and Jammu & Kashmir have also been affected. The floods have so far taken a toll of 367 lives and affected a population of 79 lakhs spread over 7366 villages in 50 districts. The loss to property and crops is estimated at about Rs 5 crores. There have also been heavy loss of cattlehead. Before the fury of the earlier floods had abated in Rajasthan fresh floods have been reported in Uttar Pradesh and Assam.

A brief review of the statewise position reveals that there have been 150 deaths in Rajasthan, 143 in Uttar Pradesh, 50 in Gujarat, 13 in Bihar and 11 in Assam as a result of the floods. The population affected has been the largest in Uttar Pradesh, *viz* 50 lakhs spread over 5,600 villages in 20 districts. In Bihar 23 lakhs people in eight districts have been affected by the floods. In Assam, the floods have hit three lakh people in 1,000 villages in eight districts. In Gujarat, 40,000 people in 116 villages in six districts have been affected by floods while 2.5 lakhs people in 650 villages in eight districts have been hit in Rajasthan. Six villages in Rajasthan including Hingonia (Tonk district) and one village, Barbe (Katihar district), in Bihar have been completely washed away by the floods. Standing crops in one lakh hectares in Bihar have been damaged by the floods.

Floods have become a hardy annual. Some state or the other always becomes the victim of floods. In fact the losses wrought by floods have assumed serious proportions over the years. The damage due to floods amounted to Rs 3,128 crores between 1974-78 as against Rs 3,104 crores between 1954-1974. Thus on an average during recent years floods result in a loss of nearly Rs 800 crores as against Rs 150 crores a year until the early seventies. Last year floods had caused a damage of about Rs 600 crores. It is essential to undertake a long-term programme for flood control as recommended by the *Rashtriya Barh Ayog* (1976) in its report submitted in March 1980, while adopting the much needed short-term measures. The Sixth Plan has provided for an outlay of Rs 1,045 crores, including Rs 175 crores in the Central sector, for reasonable flood control measures over four million hectares out of a flood prone area of 40 million hectares in the country. According to the Plan document, only 32 million hectares of the 40 million hectares are protectable, while till March 1980 an area of 11.15 million hectares was protected. The Annual Plan for 1981-82 provides for an outlay of Rs 178 crores for flood control measures as against an expenditure of Rs 395 crores last year.

It would appear that the implementation of the *Rashtriya Barh Ayog's* recommendations will take a long time, as the State Governments' views on the report are yet to be received and processed. The states have to bear the major responsibility for implementing the flood control programme as it is a state subject. Flood forecasting and preparation of master plans should receive priority in the scheme of operations. Flood mapping from space through satellites may also be resorted to. What is required is better co-ordination between the Centre and the states and monitoring of the programmes. Also there should be no let up in the flood control measures after the monsoon is over, as unfortunately has proved to be the case.

LETTER FROM SRI LANKA

End of "statelessness" for Indians

DALTON DE SILVA

COLOMBO

THE Sri Lankan Parliament recently adopted a legislation aimed at expediting the process of granting Sri Lankan citizenship to "stateless" persons of Indian origin in the country. The legislation, in the form of an amendment to the Act governing the implementation of the agreement between Sri Lanka and India regarding the status and future of persons of Indian origin in this country, provides for the grant of Sri Lanka citizenship in proportion to the number of persons registered as Indian citizens and not to the number repatriated as hitherto. It will have the effect of ending quickly the category of "stateless" persons of Indian origin in the island.

The people of Indian origin concerned are the descendants of labour brought to Sri Lanka from South India by the British about 100 years ago to work on the tea and rubber plantations they were opening here. Their number had swelled to nearly one million people about the middle of this century. The presence of such a large number of people of Indian origin concentrated in the Island's plantations in the hill country presented a serious economic and political problem. Soon after Sri Lanka gained independence from Britain in 1948 these people lost their civic rights, including the right to vote, and five years later they were deemed to be "stateless".

The presence of these people in Sri Lanka gave rise to an issue which came to be called the "Indo-Ceylon problem". The problem strained relations between the two neighbouring countries and defied solution for many years.

A breakthrough was, however, made by the then Prime Ministers, Mr Lal Bahadur Shastri of India and Mrs Sirimavo Bandaranaike of Sri Lanka, during their discussions in New Delhi in October 1964. They signed an agreement under which India accepted the repatriation and granting of Indian citizenship to 525,000 and Sri Lanka agreed to give citizenship to 300,000 together with their natural increase. Sri Lanka was to grant citizenship to four persons for every seven repatriated to India phased over a period of 15 years. At that time Sri Lanka had estimated that there were 975,000 "stateless" people of Indian origin in the country. The two Prime Ministers agreed to consider the fate of the balance of 150,000 at a later date.

Mrs Bandaranaike's Government was defeated at the general elections a few months later and the United National Party (UNP) Government which succeeded it passed legislation in 1967 to implement the agreement. The UNP Government, however, made a change linking the grant of Sri Lanka citizenship to the registration of persons for Indian citizenship by the Indian High Commission in Colombo and not to repatriation. This was to have the effect of granting Sri Lanka citizenship faster as the registration of persons for Indian citizenship by the High Commission came before repatriation which took place many months later.

When Mrs Bandaranaike returned to power at the next general election in 1970 she reverted to the procedure of giving Sri Lanka citizenship to four people for every seven repatriated.

Mrs Bandaranaike also held discussions in January 1974 in New Delhi with the Indian Prime Minister, Mrs Indira Gandhi, on the status and future of the remaining 150,000 "stateless" persons. The two Prime Ministers agreed to divide the number equally and 75,000 were to be repatriated to India and 75,000 were to be given Sri Lanka citizenship after the 825,000 covered under the first agreement were disposed of.

Although the 15-year period stipulated in the 1964 agreement expired last year, only 271,000 had been repatriated to India and 155,000 had been granted Sri Lanka citizenship up to the end of March this year. This meant that a large number of persons still remained "stateless". The position caused concern on both sides of the Palk Strait.

The implementation of the agreement had been retarded by administrative delays particularly in giving the repatriates their provident fund and gratuity monies due to them from their employment in the plantations. Under the agreement a family was allowed to take with them to India assets up to the value of Rs 4,000.

While promising to streamline the administrative procedures, Prime Minister Ranasinghe Premadasa moved in Parliament recently an amending bill designed to revert to the original legislation of 1967 linking the grant of Sri Lanka citizenship to the registration of persons for Indian citizenship and not to repatriation.

The Prime Minister told Parliament that in implementating the agreement the amendment would be advantageous for two main reasons: (a) The objective of the agreement is to resolve the problem of "statelessness" by the grant of citizenship. Once a person is granted Indian citizenship he can be repatriated to India at a time decided by the Sri Lanka Government. (b) There is always a time lag between the grant of Indian citizenship and the time of repatriation. The pace of granting Sri Lanka citizenships would, therefore, be expedited if it is related to the number granted Indian citizenship without waiting for repatriation.

The Prime Minister disclosed that there are 84,510 persons who have been granted Indian citizenship and who are awaiting repatriation. "As the law stands at present", he said, "we have to wait till these persons leave for India to grant Sri Lanka citizenship to a certain number". He said that once the amending legislation was passed, Sri Lanka citizenship could be granted straightway to 48,291 persons, constituting four-seventh of the number granted Indian citizenship and now awaiting repatriation.

Parliament adopted the amendment with 51 voting for and 5 against.

The passage of the amendment was a major triumph for Mr S. Thondaman, president of the Ceylon Workers' Congress, the trade union which represents the vast majority of plantation workers of Indian origin in Sri Lanka. Mr Thondaman, himself of Indian origin and the Minister of Rural Industrial Development, had been largely instrumental in getting the Government to move the amendment in a bid to end the phenomenon of "statelessness" expeditiously.

EDITOR'S NOTEBOOK

Vadilal Dagli

THERE has been a feeling that co-operatives are more socially responsible than the private sector companies. Co-operatives were considered slightly less sacred than public sector plants and in terms of preference, first the public sector, then the co-operatives and then the private sector. But the recent experience of co-operative sugar factories has conclusively proved that co-operatives are as socially irresponsible as any form of economic organisation. In fact, they are hand in glove with private sector sugar companies in extracting the highest possible price from consumer and in exploiting sugar scarcities. Unlike the private sector companies, they are using their political clout in furthering their profiteering motives. In the past the country has seen the incredible picture of joint delegations of co-operatives and private sector companies pleading with the Government for a sugar policy which was decidedly anti-consumer.

So I was not surprised that the Maharashtra State Co-operative Sugar Factories Association recently demanded that the export ban on sugar be lifted with effect from November 15. Why does the Association want export of sugar at a time when sugar prices still rule around Rs 6.50 per kilo which is more than double the price of sugar only two years ago? Normally sugar prices in India were lower than the world sugar prices. But now Indian sugar prices are much higher than the London sugar prices. On July 21 sugar was available at Rs 623 per quintal in Bombay while its price was Rs 383 per quintal in London, the difference being as much as Rs 240 per quintal. If sugar is available at less than Rs 4 per kilo in London why should the Indian consumer pay Rs 6.50 per kilo. If the ultimate aim of the economy is the consumer and not the sugar co-operatives' federation, the sensible thing would be to import sugar rather than export it. So I am glad that the Government is importing about two lakh tonnes of sugar. The main argument of the co-operatives is that the production in 1981-82 is expected to touch 6.8 million tonnes mark. In this situation sugar prices may go down in the next sugar season. What is wrong if the sugar prices go down in India at least to the world price level?

It is not accidental that the sugar co-operatives have started bribing the Government by donating huge amounts to Indira Pratibha Pratishthan. Their association at the recent annual general meeting presented the Chief Minister Mr A. R. Antulay, a cheque for Rs 1.82 crores for the Pratishthan. Earlier the Shetkari Sahakari Sakhar Karkhana, Sangli, alone donated Rs 21.27 lakhs to Mr Antulay. Similarly three relatively small co-operatives have given Rs 12 lakhs to this foundation. Bombay TV dutifully covered this function of handing over the speed money which was euphemistically called donation. If they give lakhs of rupees to Mr Antulay and the foundations of the ruling party, the money will certainly be recovered from the sale of sugar made to you and me. Statistically the situation of sugar seems to be comfortable. At the end of June 1981 the country had a stock of 21 lakh tonnes of sugar as against only 15.7 lakh tonnes a year ago. The Government has asked the industry to divert free sale sugar quota for public distribution system, but the industry is dragging its feet. As long as the Government goes on obliging the sugar industry by releasing sugar in such a manner that prices remain high, the sugar industry would never realise that its prosperity and even profiteering is entirely dependent on government policy.

★

ALL modern governments are faced with the problem of increase in government spendings. Government spending leads to increase in inflationary pressures and inflation again increases government expenditure. This cycle goes on from the richest country like the United States to a poor country like India. Recently the Government of Sri Lanka decided to impose yet another cut in government's spendings so that the budgeted deficit is reduced. They have also made reduction in capital expenditure, and ministries have been asked to limit their expenditure to 90 per cent of the voted funds. In other words, a cut of 10 per cent. Thus the Government of Sri Lanka has evolved two guidelines in the determination of priorities in the public spendings: (i) quick return on capital spent; and, (ii) employment generation. In other words, merely increase in projects with long gestation periods would have low priority insofar as the government expenditure is concerned. While real GNP in Sri Lanka grew by 6.2 per cent in 1979, money supply increased by as much as 29 per cent in that year. In 1980, the growth rate was 5.5 per cent, but money supply was 20 per cent. As a result, in 1979 prices went up by 11 per cent and in 1980 by more than 26 per cent. In the current calendar year also the gap between growth and money supply has been widening still more rapidly.

★

WEIGHT reduction drugs are a multi-billion dollar business in the West. But it seems that to take drugs to reduce weight is waste of money. A recent study carried out by the University of Pennsylvania in the United States has established that weight reducing drugs are a far less effective method to lose weight than the change of the style of life through proper dieting and exercise. One group of persons—mostly women—was given a common drug of weight reduction—'fenfluramine hydrochloride' (which is sold under the brand name of Pondimin). What was the result? The study says: "They got used to having the drugs act for them, and they relied on it very heavily....so when they stopped using it they went back to old habits". Those who took drugs lost weight, but they gained back the weight during the next year. But those who took no drugs at all but changed their lifestyle by taking proper diet and doing regular exercise lost weight and did not become over-weight again. The study has concluded that weight reducing drugs are as good as useless while changing habits covering diet and exercise was more rewarding.

★

ON the eve of the marriage of Prince Charles with Lady Diana the London *Times* has published a small delightful letter from one Major Ralph Rochester which throws light on female psychology. Here is the letter:

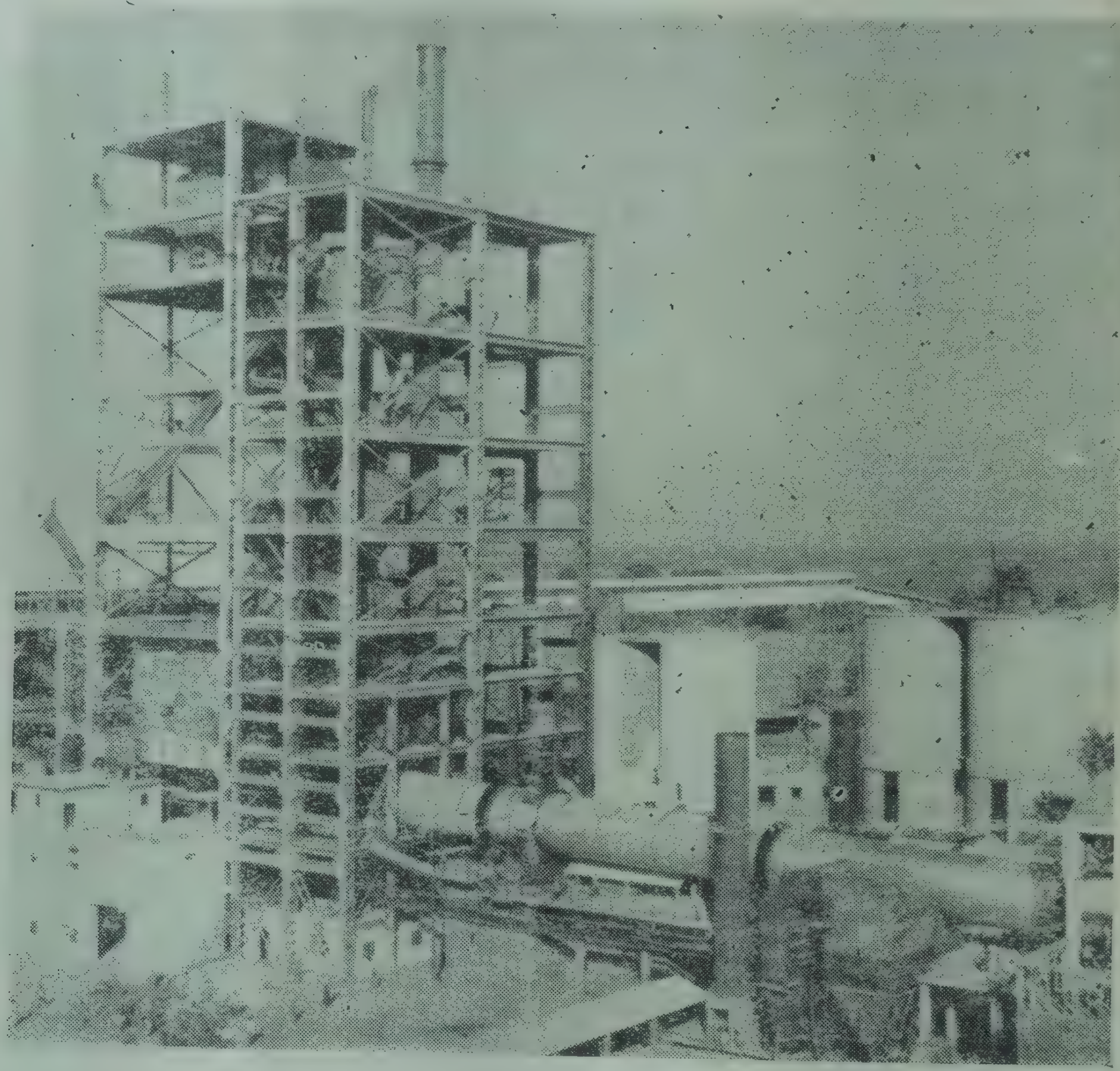
Sir: I have observed of late numerous girls who are taking pains to look like Lady Diana; but, of the boys I have observed, none is making the least effort to look like the Prince of Wales, How should this be?

Yours faithfully,
Ralph Rochester.

SPECIAL ARTICLES

A SHOT IN THE ARM FOR CEMENT

By D. B. Mahatme



A general view of the ACC's Chanda Cement Works in Maharashtra with preheater tower on the left.

THE cement industry, it is estimated, made a capital investment of Rs 175 crores, at the rate of Rs 650 per installed tonne, to increase its capacity by 2.7 million tonnes between 1978 and 1980 to 24.35 million tonnes. But its production dropped from 19.56 million tonnes in 1978 to 17.75 million tonnes in 1980 and the country has still to reap the benefit of this huge investment. Shortage of coal and power and transport bottleneck were among the infrastructural difficulties the industry had to face, as a result of which capacity utilisation dropped from 90.2 per cent in 1978 to 72.9 per cent in 1980 (See Table 1). Obviously also unremunerative retention prices had very much to do with the poor performance of the industry and, while the black market in cement has continued to flourish, some of the cement manufacturing units this year had run into cash losses.

Last week's hike in retention prices for the cement units, has, therefore, come as a shot in the arm for the industry. The increase is of the order of Rs 34.74 per tonne compared to the measly Rs 13.65 per tonne in 1980 against the demand of Rs 28.54 of the industry. This year too the industry had worked out on the basis of the formula laid down in 1978 by the Lavraj Committee that the escalation in cost till May 1981 was Rs 42.14 and the increase in the retention prices by Rs 34.74 does not, therefore compensate the industry fully. But at least the Government has made the higher retention prices operative retroactively from May 3, 1981, and this should enable a company like ACC with a monthly production of five lakh tonnes to close the year in July with a better financial picture than would have been the case with the company running into cash losses.

The Lavraj Committee had recommended in 1978 three-tier retention prices of Rs 185. Rs 205 and Rs 220 per tonne for the existing units and Rs 296 for new units and substantial expansion. Thus, with the two increases of Rs 13.65 in 1980 and Rs 34.74 last week, the new retention prices will be Rs 233.39, Rs 253.39, Rs 268.39 and Rs 344.39 for new units and substantial expansion. The industry is not all happy at the new retention prices but it is not also unhappy. Actually, the Cement Manufacturers' Association has pointed out that there has been an escalation in cost in June and July by Rs 5 a tonne, and cement producers are likely to make a representation to the Government to make good this escalation in cost, as also the shortfall of Rs 7.40, being the difference between the increase in retention price which had been demanded by the industry and the increase of Rs 34.74 granted by the Government.

Power tariffs in such states as Andhra Pradesh, Madhya Pradesh and Bihar have gone up and the Lavraj Committee had recommended that in the event of an increase in the prices of coal, as increase in the freight on coal and hikes in power tariffs, neutralisation of such cost should be provided in the retention prices. The Energy Minister, Mr

Table I : Performance of cement industry during 1978, 1979, 1980 and 1981

(In lakh tonnes)

Month	1978			1979			1980			1981		
	Installed capacity	Cement production	Capacity utilisation	Installed capacity	Cement production	Capacity utilisation	Installed capacity	Cement production	Capacity utilisation	Installed capacity	Cement production	Capacity utilisation
			%			%			%			%
January	17.95	16.91	94.2	18.18	16.74	92.1	20.01	15.05	75.2	20.50	16.29	79.4
February	18.01	15.90	88.3	18.18	15.54	85.5	20.01	13.08	65.4	20.71	15.65	75.5
March	18.01	18.94	105.2	18.33	17.43	95.1	20.10	14.99	74.6	20.71	17.89	86.3
April	18.02	16.10	89.3	18.22	14.55	79.9	20.10	13.76	69.0	20.82	15.00	72.0
May	18.02	15.94	88.5	18.32	15.99	87.3	20.27	13.40	66.6	20.82	16.56	79.5
June	18.02	14.84	82.4	18.32	15.45	84.3	20.27	13.21	65.7	—	—	—
July	18.02	15.85	87.9	18.32	15.96	87.1	20.27	14.47	72.0	—	—	—
August	18.02	15.76	87.7	18.69	15.04	80.4	20.50	16.02	78.1	—	—	—
September	18.18	15.64	86.0	18.69	14.35	76.8	20.50	15.03	73 3	—	—	—
October	18.18	15.84	87.1	19.11	14.26	74.6	20.50	16.07*	78.4	—	—	—
November	18.18	16.17	88.9	19.46	12.45	64.4	20.50	15.17*	74.0	—	—	—
December	18.18	17.73	97.5	19.79	14.84	75.0	20.50	16.69*	81.4	—	—	—
Total:	216.79	195.62	90.2	223.60	182.60	81.7	243.53	176.94	72.6	103.56	81.39	78.59

NOTE : Business of Dalmia Dadri Ltd:, closed on 31.3.1980. Its capacity is not taken into account while calculating capacity utilisation of the industry.
Source : Cement Manufacturers Association

A.B.A. Ghani Khan Choudhury, has hinted that an increase in coal prices was under consideration which, if it comes about, should entitle the cement industry to an increase in retention price. Whether the Government will act promptly or pursue the policy of only annual increases while the Lavraj Committee had recommended six-monthly, if not quarterly, adjustments in prices is to be seen. The Government as well may decide to wait for the report of the Cement Development and Price Review Committee, headed by Dr A. K. Ghosh, which is expected to submit its recommendations by the end of this year. In any case the new retention prices announced last week are to be operative till May 3, 1982.

In announcing the increase in retention prices the Government has raised the consumer price by Rs 81.91 per tonne or Rs 4.10 per bag of 50 kg. It will look on paper that cement has been made costlier for the consumer. But this may not be actually the case. The blackmarket has been flourishing in cement and the ordinary consumer has already been paying Rs 100 to Rs 110 per bag of which the controlled price was till recently Rs 30. Politicians and bureaucrats, with the state governments in-charge of distribution of cement, have helped the blackmarket to grow. Some of the cement factories have also exploited the situation. A mere suggestion by these factories that the permit-holders will have to wait in a queue of which the duration was unspecified has made the anxious party concerned to pay some on-money. It is, however, the corrupt official machinery which has exploited the shortage situation most. Official assessments are that there is a shortage of about eight to nine million tonnes and the industry has been going along with this assessment. But imports are of only two million tonnes a year and it is doubtful whether the shortage is as big as is tried to be made out.

The increase in the price of cement, of course, means that the government projects will be costlier. The Government is the largest consumer of cement and purchases 50 per cent of the total production of the industry. If the higher prices lead to some economy in the use of cement in the government projects, they will have served a good purpose. As it is, it is known that there is a wastage of cement in government projects whether for housing, irrigation, electricity or public sector undertakings. Some even allege that part of the cement quota earmarked for government projects finds it way in the blackmarket.

Cement is a basic commodity of which the growth has not been adequate because of the industry being subjected to rigid price controls almost continuously since 1942. That the low retention prices have proved a damper to the growth of the industry can be seen from the fact that in not a single plan period the targets—whether in regard to production or capacity—were achieved. In the First Plan the shortfall was nominal, but the gap widened in the subsequent years (See table 2). It is presumably because of this the Government has already approved adequate additional capacity of the order of 33 million tonnes.

The Sixth Plan proposes to increase the cement capacity to 43 million tonnes and a production target of 34.5 million tonnes for 1984-85 is envisaged. On the basis of a statement in Parliament by the Union Minister of State for Industry, Dr Charanjit Chanana, that the demand estimate for 1980-81 was just short of 28 million tonnes, the industry has calculated that the demand would rise to 38 million tonnes by 1984-85 even on a growth rate of eight per cent per annum. It has also worked out that the capacity required at 80 per cent utilisation will be 48 million tonnes and 85 per cent utilisation 45 million tonnes to meet this demand. The current annual capacity this year was about 26 million tonnes and this would mean that if the country were to become self-sufficient by 1984-85, an additional capacity of the order of 20 to 22 million tonnes has to be created. The capital costs have now risen to at least Rs 800 per tonne and on this basis the industry will have to make a massive investment of Rs 1,600/Rs 1,760 crores. Will this investment be forthcoming if the Government does not bring to bear a pragmatic outlook on the cement pricing policy ? The investment will be quite massive even if the official targets in the Sixth Plan are taken into account. The necessary investment environment must be created by the Government for imports are costly and we have to pay two to three times the price that the domestic producers receive.

It is a healthy sign that the Sixth Plan recognises that lack of adequate infrastructural facilities like coal, power and transport have led to the underutilisation of capacity in the cement industry during the recent years. The percentage of coal received by the cement units was 79.5 per cent of the linkage of nearly 64 lakh tonnes in 1978, 67.5 per cent of nearly 72 lakh tonnes in 1979 and as low as 53 per cent of the linkage of nearly 75 lakh tonnes in 1980. The position had not improved during the current year and the coal supplies were only 61 per cent of the demand during the first five months of the current year.

Power shortage too affects the cement industry. The announcement last week, simultaneously with that of an increase in retention prices, that the Government had also decided to extend the scope of the scheme of subsidy for generation of power for captive power plants set up by cement plants after October 1978 must be welcomed. Strangely enough when the Government decided on a captive power subsidy of 31 paise per kwh for diesel power and five paise per kwh for thermal power in 1978, it said the benefit would accrue to only captive generators existing as of the date of announcement of concession. This has discouraged cement units from going in for captive power even in the days of power shortage. Reportedly four or five cement units generate their own power. But now that the subsidy will be extended to captive generating sets installed even after October 1978, it is expected that at least 15 to 20 companies more will go in for such a programme.

But even if the problems of coal and power availability and transport are solved the critical element in the growth of the industry will continue to be an adequate price. This question is being examined, as stated earlier, by the Ghosh Committee and the cement industry has made its own submissions before the committee. Reportedly it has suggested that fair retention prices should be worked out on the basis of 80 per cent capacity utilisation and not 85 per cent as it is implicit in the Lavraj Committee report. Further, retention price escalations should be granted on a quarterly basis. It has also suggested the setting up of Cement Industry Development Fund to help finance modernisation and expansion of the industry. The Ghosh Committee is expected to recommend whether the three-tier pricing system should continue or it should be substituted by a new one. Also, in the context of increasing capital costs and the ambitious target that the Sixth Plan has set in the creation of cement capacity, it will presumably examine whether new incentives in the form of higher retention prices or subsidies or concessions should be extended to the industry. Originally the committee was expected to submit its report by September-end but the time has now been extended to December-end, and Dr Ghosh is known to be very keen on sticking to this time schedule.

But should the industry be under rigid price control as it has been for the last forty years? Within the industry itself there is a division of opinion. But the recent enlargement of the terms of the L. K. Jha panel on Economic Reforms has given the industry some hopes that it can be at least free partially from the controls. The Jha panel has been asked to go into the question of liberalisation of controls and the industry is preparing its case to be placed before Mr Jha.

At a recent meeting in Madras, the managing committee of the Cement Manufacturers' Association was reported to have considered two alternative approaches—the first one being dual pricing and the second partial decontrol. Under the first scheme the Government would get the cement at controlled price and 50 per cent of the output would be sold to the public at a price of Rs 200 per tonne higher than the price at which it is sold to the Government. This scheme involves the creation of so to say a development and modernisation fund. It proposes that out of extra Rs 10 per bag recovered from the public, Rs 5 should be funded in a joint account of the cement unit concerned and the Government, an account from which money can be drawn only when required for modernisation and development. The balance of Rs 5 will, it is expected, enable the cement unit to meet the escalation costs.

The other scheme involves partial decontrol. It would sell the cement required by the Government at a fixed price but leave free the cement industry as to the price to be recovered from the other consumers. It will give a good-bye to the freight equalisation pool. But the ACC and cement units in southern India would seem to prefer the dual pricing scheme under which the freight pool will continue to operate. Under the pool scheme cement units receive payment from the Cement Regulation Account or have to reimburse the Account depending on whether the freight involved is higher or lower than the average freight taken into account by the Cement Controller. Not surprisingly the southern units do not want to see the operation of the pool disturbed and if the Jha panel has to make a choice between the two it is likely to favour the dual pricing scheme under which the freight pool will continue to operate and the consumer is also assured of cement at a fixed price. It is not likely that the Government in view of the assessed shortage of cement will rely on the cement industry to be fair to the consumer. Of course, the consumer under the present distribution arrangements, which are controlled by the state governments, is not also treated fairly but that is a different question. Under the dual pricing scheme, distribution of cement will not be left with the state governments but with the stockists of cement manufacturers, as before 1977, on the basis of permits issued by the authorities. The industry believes that even if the consumer has to pay a blackmarket price in some instances, it will not be as high as he is doing today with distribution left in the hands of the state governments.

Teble 2: Growth and development of the cement industry during the first four Five Year Plans and each year of the Fifth Plan

(Million tonnes)

	Capacity		production		shortfall in	
	Targer	Achievement	Targer	Achievement	Capacity	Production
First Plan (ending 1955-56) ..	5.31	5.02	4.80	4.60	—0.29	—0.20
Second Plan (ending 1960-61) ..	16.00	9.30	13.00	7.97	—6.70	—5.03
Third Plan (ending 1965-66)	15.00	12.00	13.00	10.82	—3.00	—2.18
Fourth Plan (ending 1973-74)	21.50	19.76	18.00	14.67	—1.74	—3.33
Fifth Plan* (1978-79)	23.50	—	20.80	—		
1974-75	—	20.06	—	14.81		
1975-76	—	21.16	—	17.30		
1976-77	—	21.65	—	18.65		
1977-78	—	21.70	—	19.10		

* The Fifth Plan was in force only for four years as it was terminated by the financial year ended 31st March, 1978.

Priority allotment of cement against foreign exchange

By BHANU SANGHVI

EVEN in these days of dire shortage and rampart black marketing, one can easily get necessary quantity of cement directly from the manufacturer or his nominee at official price in a jiffy without any pull or pressure or any sort of underhand dealing. There is a government scheme for priority allotment of cement against foreign exchange remittances which is functioning very efficiently and scores of people are taking advantage of it without any difficulty.

This scheme is being handled jointly by scheduled banks operating in foreign exchange business and the concerned state governments. Following is a brief outline of the scheme :

Eligibility : The scheme is meant to provide priority allotment of cement to individuals only, for his personal residential purpose utilisation. Business houses, associations and institutions are not eligible to apply. Even joint applications of more than one person are not accepted. Any Indian national who has returned to India from abroad or relatives of an Indian residing abroad who might have received foreign exchange remittances to purchase the cement from latter can apply for priority allotment.

Time limit : Foreign exchange remittances which are more than three months old on the day of the application do not qualify for this scheme

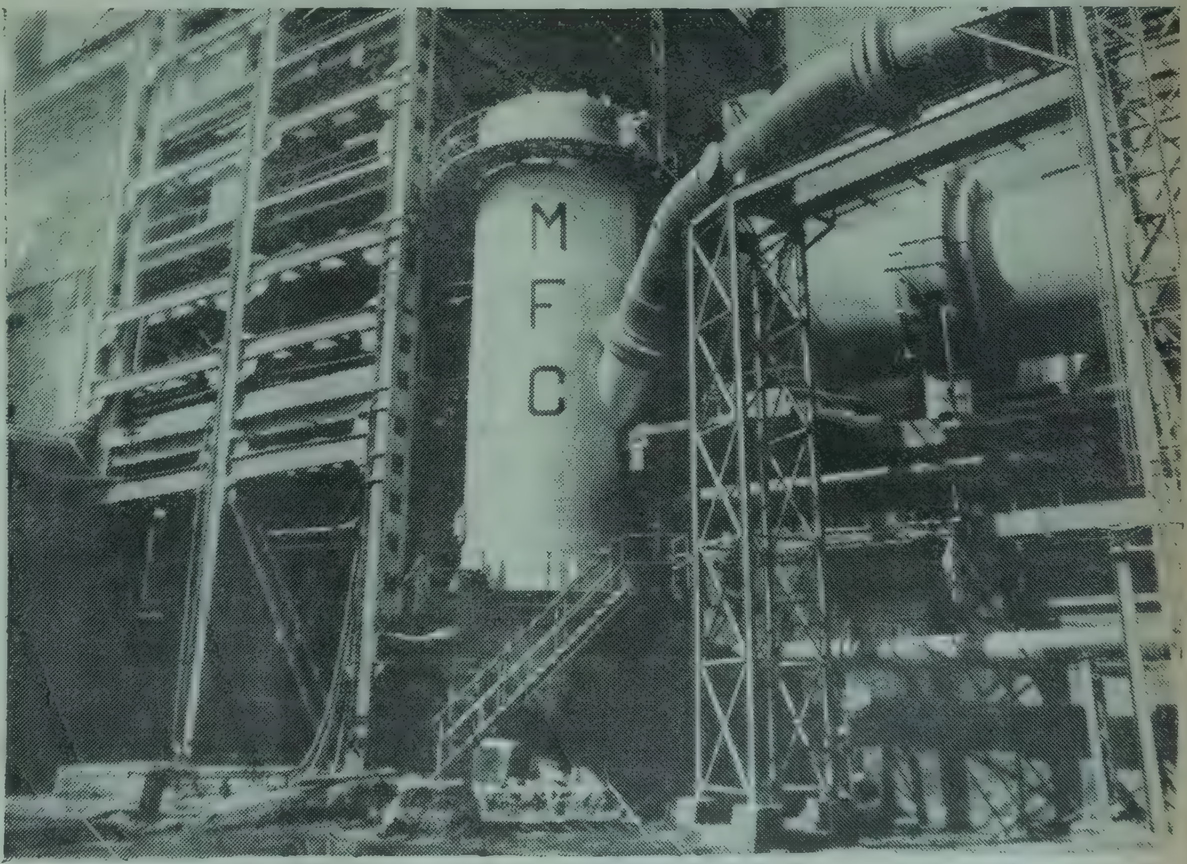
Procedure: Application forms could be obtained free of charge from any scheduled bank authorised to deal with inward remittances of foreign exchange or PRO, Food and Civil Supplies Department, Government of Maharashtra, 2nd Floor, Mantralaya (Annexe) Bombay-400 032. Those residing in Gujarat or other state can obtain such forms from Sachivalaya of their respective states. The application form is very simple and self explanatory. The applicant is required to open "a non convertible account" in his name and credit in it whatever cheque, draft, MT, TT or traveller's cheque he might have received for this purpose and submit his application for cement to the bank. The bank forwards his application to the state government with its endorsement by registered post only. The applicant will receive his allotment order also by registered post only as the government neither receives nor issues any paper in person in this connection. Usually it does not take more than 45 days for applicant to receive his allotment order.

Other details: Non-resident Indians can utilise their balance in foreign exchange external or foreign currency non-resident, (FCNR) accounts for this purpose. Where the applicants have already remitted funds for credit to their non-resident (external) accounts with their bankers and wish to apply for allotment of cement on the strength of those funds, the requisite amount under the scheme should be transferred to a separate 'non-convertible account' to be opened for this purpose. The amounts so transferred will not be eligible to be recredited to the non-resident (external) account or to be remitted abroad except where an applicant desires to cancel his application for priority allotment of cement. Prior permission of the Reserve Bank of India will be necessary for such retransfer.

There are no minimum/maximum limits for allocation. One may apply for as much as quantity as required but all the applications for more than 20 tonnes (400 bags) have to be accompanied by a certificate of a registered architect or engineer, justifying the quantity applied for.

One must bring in foreign exchange at the rate of Rs 700 per tonne of cement applied for. However, only actual prevailing price has to be paid from the account to the supplier and balance amount, if any, could be utilised to make any other local payments.

Mr Sanghvi is an assistant editor in the Gujarati bi-weekly, VYAPAR.



Precalcinator technology developed by Mitsubishi Mining & Cement Co Ltd, Japan, was adopted for the first time in the world at ACC's Wadi Cement Works in Karnataka. This technology results in higher output with the same quantity of fuel introduced at the kiln firing end. Picture shows the MFC precalcinator vessel on one of the kilns at Wadi.

On estimating the household sector savings in currency and deposits

By A. VASUDEVAN

ONE of the aspects of the data of savings of the household sector which has not received due attention relates to savings in the form of currency and bank deposits. In view of the reported formation of a committee on savings and investment, it is essential to have a thorough look at the data of savings, especially of savings in the form of currency and deposits by the households, both from the analytical and statistical angles.

In the household sector's savings, which formed about 77 per cent of the total net domestic savings in the 'seventies, net financial savings accounted for more than 35 per cent. Financial savings are given in *net* terms, by reducing financial liabilities from the financial assets held by the households. The financial assets are : currency, deposits, life insurance fund, provident funds, shares, bonds, debentures of corporate and cooperative sectors, units of the UTI, small savings, loans to companies, securities of term lending institutions and other assets. Among these, the most important are currency and deposits, as they accounted for 62.2 per cent of financial assets of the households on the average during the period 1971-72 to 1979-80. Table 1 gives details in this regard.

The table shows that the average share of deposits during the period in the financial assets held by the sector was about 48 per cent while that of currency was 14 per cent. The proportion of currency and deposits in financial assets was high at 73.3 per cent in 1976-77 and low at 49.1 per cent in 1974-75. The amplitude between the high and the low shares thus was 24.2 percentage points.

It may be asked as to why in a short period of nine years, the amplitude was so high. Does this suggest that the savings behaviour in respect of certain assets changes drastically year to year ? Or, is it something of a statistical derivation? No theory as yet gives any clue as to why savings propensities change in the short run. All that the theory suggests is that the savings behaviour would not show wide fluctuations over time and that it is essentially a function (positive) of income (obviously nominal). But in so far as currency and deposits dominate as forms of savings in total gross financial assets, it is essential to know as to why households *demand* currency and deposits to such an extent, merely to place them under their savings. Implicitly, what is so demanded of currency and deposits is *supplied* by the monetary authorities and the commercial and cooperative banks. In other words, savings in financial assets are, to a considerable extent, dependent upon the supply of currency and deposits *i.e.*, 'broad' money (defined here currency with the public and aggregate bank deposits).

It is interesting to compare the actual increases in currency with the public and in aggregate bank deposits with the savings in the form of currency and deposits for the 'seventies. This comparison, made in Table 2, shows that currency and deposit savings were higher whenever there was an increase in 'broad' money. Currency savings, in particular, were highly positively corelated with the incremental currency with the public, 'r' being 0.9978, and statistically significant. Savings in deposits and increases in deposits too were positively correlated, with the value of 'r' being lower at 0.9683, but statistically significant.

Given these statistical facts, one is left to wonder whether savings in currency and deposits do not automatically follow, by the given linking factor—the 'beta' coefficient or the slope in the regression equation—once there is a certain variation in 'broad' money. Is this a mere statistical derivative or are there any 'behavioural' elements in the propensities to save in currency and de-

Table 1 : Financial assets

(Rs crores)

Years	Currency	Deposits	Currency & Deposits	Gross financial assets	(1) as % of (4)	(2) as % of (4)	(3) as % of (4)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1971-72	404	1024	1428	2348	17.21	43.61	60.82
1972-73	637	1214	1851	3004	21.21	40.41	61.62
1973-74	769	1511	2280	3632	21.17	41.60	62.77
1974-75	18	1654	1672	3402	0.53	48.62	49.15
1975-76	342	2871	3213	4994	6.85	57.49	64.34
1976-77	1140	3920	5060	6905	16.51	56.77	73.28
1977-78	703	3535	4238	7113	9.88	49.70	59.58
1978-79	1525	4304	5829	9286	16.42	46.35	62.77
1979-89	1398	4272	5670	9559	14.62	44.69	59.32
Average	771	2701	3471	5583	13.81	48.38	62.18

Source : Reports on Currency & Finance, Vol. II of 1975-76 1977-78 and 1979-80.

Table 2 : Increase in savings

(Rs crores)

	Actual increases in		Savings in		(3) as per cent of (1)	(4) as per cent of (2)
	Currency with public	Aggregate Deposits	Currency	Deposits		
	(1)	(2)	(3)	(4)	(5)	(6)
1971-72	430	1223	404	1024	93.95	83.72
72-73	637	1705	637	1214	100.00	71.20
73-74	883	1733	769	1511	87.08	87.18
74-75	26	1877	18	1654	69.23	88.11
75-76	358	2571	342	2871	95.53	111.66
76-77	1168	4089	1140	3920	97.60	95.86
77-78	758	4418	703	3535	92.74	80.01
78-79	1600	5510	1525	4304	95.31	78.11
79-80	1422	5464	1398	4272	98.31	78.18
Average for the period	809	3177	771	2701	95.30	85.02

Note : The actual increases in currency with the public and aggregate deposits with banks are worked out from money supply tables for March 31. **Source** RBI Bulletins. November 1979 and November 1980.

Views expressed here are the author's own and should not be attributed to the organisation to which he belongs.

posits? Apparently, it looks that the behavioural aspect is not present, and the data of currency and deposits savings are essentially statistical derivations. This may be proved by referring to what is presumed to be the method of estimation of savings in these two forms of assets.

First the currency savings. From the outstanding currency with the public as on March 31, is deducted the cash balances held by the Government and corporate sector in order to arrive at what may be loosely termed as the currency held by the household sector. This procedure is carried out for each year. The difference in the currency with the household sector for any two years is deemed to be saving in currency for the later of the two years. On the average 95 per cent of increase in currency with the public is reported to be savings in currency between 1971-72 and 1979-80.

In respect of deposits, the survey of ownership of deposits of the Reserve Bank of India throws light on the proportions of deposits held by different sectors. Applying these proportions, one can arrive at the sums of deposits held by different sectors. It appears that the sums of deposits held by all those sectors which do not constitute the household sector are first worked out, and reduced from the aggregate deposits, so as to obtain what may be regarded as the deposits held by the household sector. The difference in the deposits of the household sector for any two years gives the savings in the form of deposits for the later of the two years in question. Over the nine year period, 85 per cent of the rise in deposits constitutes the household sector's savings in deposits. In the last three years, the proportion was about 78-80 per cent.

If this is what is broadly followed in estimation, it implicitly assumes that all the increased sums of currency and deposits *demanded and held* by the household sector are saved during the year and that whatever the sector has utilised as transaction (and precautionary) balance is equivalent to the outstanding currency and deposits of the sector at the time of the origin. This point may be illustrated as in Table 3.

Table 3 shows that when the sector increased its holdings of currency and deposits in period t+1, by Rs 1,000 crores, the transaction balance was the same as at period t, *i.e.* Rs 20,000 crores. When the sector reduced by Rs 500 crores its holdings of currency and deposits in period t+3, the sector's transaction balance was deemed to be the same as in period t+2. This means that transaction balances are given by the estimation method of savings rather than by any behavioural factors. This violates one of the important hypotheses in the demand for money, *viz,* the demand for transactions balances is positively correlated with nominal income or output and prices.

It is possible to improve the estimation of savings in currency and deposits by using better analytical techniques. We attempt to sketch them out in brief for purposes of illustration. As regards currency savings, it is first essential to work out the income velocity of currency held by the household (given by the ratio of national income at factor cost at current prices to the currency held by the household sector). If this velocity declines/rises, it means that the demand for currency by the household sector has gone up/declined. Trends in this velocity give an idea of the demand for currency by the households but they do not indicate as to what extent the households demand cash for speculative purposes and to what extent the cash demand is for transaction (including precautionary) purposes.

For knowing the transaction cash balances of the households, one could first relate functionally the income velocity of currency of the households to the weighted short term rates of interest (such as the call money rate and the bank rate), then derive the cash balances that households tend to hold for speculative purposes and finally reduce the speculative cash balances from the outstanding currency with the households. With regard to savings in deposits, it is essential to have an idea of the quantum that households would hold in different types of deposits. The ownership survey will give the amount of fixed deposits that households hold. The difference in the amounts of fixed deposits of households for any two years will give savings in fixed deposits by the households for the later of the two years in question. (By the same token, all the increases in the deposits with non-banking companies may be taken as savings by the household sector).

Table 3 : Outstanding currency and deposits

(Rs crores)

Period	Outstanding currency & deposits of the households	Increases/decreases in currency & deposits (saving (+) or disaving (—)	Transaction Balance in currency & deposits
	(1)	(2)	(3)
t	20,000	—	20,000
t+1	21,000	+1,000	20,000
t+2	21,500	+ 500	21,000
t+3	21,000	— 500	21,500
t+4	22,000	+1,000	21,000

In respect of current deposits debits, data, would provide an idea of current deposit velocity (the ratio of debits to current accounts to current deposits). A rise in current deposit velocity will imply a fall in the demand for current deposits. The amounts oustanding in current accounts which are not debited should be treated as the current deposit balances held by the household sector. The difference in such current deposit balances of the household sector for any two years will give savings in current deposits by households for the later of the two years considered. Here, however, the available debits data relate to 1974-75. As for savings deposits, the time liability component can be regarded as almost term deposits, held by the household sector. The difference in the time liability sums of savings deposits for any two years will give the savings in the form of savings deposits by the household sector.

Both in respect of currency and deposits, increases between March 31 of a year and March 31 of the subsequent year will contain 'shock' effects. It is best to work out averages of outstandings of currency and deposits at the end of each month for the years in order, to know the 'flow' of these two variables through the years.

The alternative method of estimation of savings of the household sector in currency and deposits suggested here would, it is hoped, give a more realistic picture of the households' savings in these two financial assets than what the present estimates show. It is possible to make improvements and to introduce refinements in our suggested method, by using additional and qualitatively better data of short term rates of interest, the size of different money markets and debits to current deposits.

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- **Agricultural Credit up** by 30.6%—to Rs. 65.8 crores
- **Adopted Villages grew** to 1113
- **Advances to Small-Scale Industries grew** to Rs. 84.9 crores—on 30,783 accounts
- **Branch Network up** by 37—to 825
- **Total Income up** by 30.6% (Rs. 25.8 crores)

STRONGER CONCERN FOR WEAKER SECTIONS

- **Credit under 20-Point Programme up** by 29.5%—to Rs. 44.8 crores
- **Small Depositors** formed 89% of all Deposit accounts
- **Small Borrowers** formed 94% of all Credit accounts
- **Small & Marginal Farmers** received 64% of direct agricultural credit
- **Weaker Sections** helped under DRI Scheme grew to 40,482 accounts
- **Scheduled Castes/Tribes** accounted for 35% of total credit under DRI Scheme

INTERNATIONAL BANKING DISTINCTION

- **Foreign Branches' Deposits up** by 57.9%; Advances by 64.2%
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- **FCBU inaugurated** at Colombo
- **Continued** consultancy to PT Bank Rama, Jakarta
- **Submitted** bankable schemes Survey Report to Govt. of Sri Lanka

Extracts of BALANCE SHEET as at 31st December, 1980

as at 31 - 12 - 1979 Rs. (crores)	Capital & Liabilities	Rs. (crores)
6.00	Capital (wholly owned by Government of India)	6.00
1.27	Reserve Fund and other Reserves	1.79
980.17	Deposits and other accounts	1,164.04
44.45	Borrowings from other Banking Companies, Agents, etc.	49.94
11.70	Bills Payable	13.59
51.94	Bills for collection being Bills Receivable as per contra	64.42
12.86	Other Liabilities	18.23
59.13	Acceptances, Endorsements and other Obligations as per contra	92.93
0.21	Balance of profit (after transfer to Reserve Fund & provisions for bonus) to be transferred to Central Government	0.21
1,167.73	Total	1,411.15

as at 31 - 12 - 1979 Rs. (crores)	Property & Assets	Rs. (crores)
127.04	Cash	142.08
8.36	Balance with other Banks	5.94
12.02	Money at Call and Short Notice	6.16
269.17	Investments	358.56
591.13	Advances	681.94
51.94	Bills Receivable being Bills for collection as per contra	64.42
59.13	Constituents' Liabilities for Acceptances, Endorsements and other Obligations as per contra	92.93
2.05	Existing Premises & Buildings under construction	3.49
5.60	Furniture, Fixtures etc.	6.08
41.29	Other Assets	49.55
1,167.73	Total	1,411.15

Extracts of PROFIT & LOSS ACCOUNT for the year ended 31st December, 1980

Year ended 31-12-1979 Rs. (crores)	EXPENDITURE	Rs. (crores)
56.65	Interest paid on Deposits, Borrowings, etc.	75.24
17.50	Salaries & Allowances, Provident Fund, Gratuity, etc.	22.70
7.84	Operating and other Expenses	9.83
0.86	Depreciation on and Repairs to Bank's Property	0.95
1.64	Balance of Profit	1.60
84.49		110.32

Year ended 31-12-1979 Rs. (crores)	INCOME	Rs. (crores)
76.24	Interest and Discount	100.47
6.65	Commission, Exchange and Brokerage	8.06
0.17	Rents	0.20
0.09	Net Profit on Sale of Investments and Various Assets	0.05
1.34	Other Receipts	1.54
84.49		110.32

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In My View

Where's the government?

By AJIT BHATTACHARJEA

A PUBLIC opinion poll to select the most inefficient ministers of the Government of India would come up with some intriguing results. The first problem, of course, would be that most members of the public, even in the bigger cities, may not be able to recall too readily even the names of all the members of the Union Cabinet, let alone their portfolios. Presumably, the pollster would have to take with him a list of the ministers' names and the departments of which they hold charge, with ticks to indicate whether the persons polled think they do their jobs effectively, adequately or badly. A separate box can indicate whether the minister concerned is also regarded as corrupt.

In the present Cabinet, only three ministers may pass public scrutiny as both effective and honest (whether one agreed with their policies or not) : Mrs Indira Gandhi, Mr Narasimha Rao and Mr R. Venkataraman. Over the others hangs a question mark. I doubt if any would survive if their future depended on a favourable result at the polls.

If public memory were not so short, at least two should have been forced out of office long ago. Not even a year ago, the Minister of Energy, Mr A. B. A. Ghani Khan Chaudhury, was charged specifically on the floor of the Lok Sabha with misusing his official position to persuade the authorities to issue 133 coal permits to persons not entitled to get them. Almost the entire quantity had been smuggled to Bangladesh. It was pointed out that the coal allocation had been made to Malda district in West Bengal, part of the Minister's constituency, shortly after the Lok Sabha elections.

Though present in the House, Mr Ghani Khan Chaudhury, did not deign to reply to the charges. Instead his colleague, Mr C. M. Stephen (whom we shall come to later) described the charges as "a non-issue". This was bad enough, but worse was to follow. Mr Stephen justified the issue of permits to favourites with a rhetorical question. If his colleague's friends approached him for permits, he asked, "could he keep quiet?". Another colleague, Mr P. Shivshankar demonstrated his eminent suitability as the minister in charge of Law and Justice by ruling: "If he (the minister) nurses his constituency, there is nothing wrong in it."

With such defenders, Mr Chaudhury needed no critics. They represented the prevailing ministerial standards better than he. The Railway Minister, Mr Kedar Pande, was therefore possibly fortunate that Parliament was not in session when the crowded Samastipur-Barmankhi passenger, with hundreds travelling on the roof, fell from a bridge into the turbulent, silt-laden Bagmati river on July 6. As many as 246 bodies were recovered, most of them by naval divers working in horrifying conditions, but many more were swept away. Some estimates put the toll at 2,000.

This was certainly the worst disaster in rail history. A quarter century ago, Mr Lal Bahadur Shastri, resigned the Railway portfolio, after a far smaller accident. But there was not even a squeak from Mr Pande. The chairman of the Railway Board made things worse by suggesting that the train has been blown off the bridge by a freak cyclone, even though it left no trace of its devastating passage anywhere else in the vicinity.

Last week, 41 passengers died in another train accident near Bilaspur and another 22 when the Ahmedabad-Delhi mail derailed near Mehsana. But these can hardly disturb a minister who was unmoved by the Bagmati disaster. When Parliament reassembles next month, Mr Stephen or Mr Shivshankar may well describe any charges against Mr Pande as another "non-issue". The Law Minister, if still holding the portfolio, may also see nothing wrong in trains being overcrowded in the Railway Minister's home state.

Eloquent in defending his colleagues, Mr Stephen excels in defending himself. The unfortunate telephone users in this country will never forget his suggestion in Parliament last year that they surrender their phones if dissatisfied with the service. In Delhi, particularly, many exasperated phone users would enjoy throwing the instrument at him if he dared make the offer outside.

On an average, it takes three wrong numbers to get through to the right one. Wrong numbers are not confined to local calls. STD calls to distant places suffer the same disability. After repeated attempts to dial Bombay, I once got through to London! But Mr Stephen would probably justify all this as a unique way to increase revenue by increasing inefficiency.

The minister may also not quite realise the mess the system is in. After getting three numbers, innumerable wrong connections, hearing strange sounds in the receiver and then wasting ten minutes awaiting assistance from 199, I called his own residential number. It rang, but no one picked the phone. I then called his office and got through promptly, only to be informed that the minister was still at home. On insisting that nobody seemed to be at the residence, I was told that the minister must be in transit. Perhaps he is.

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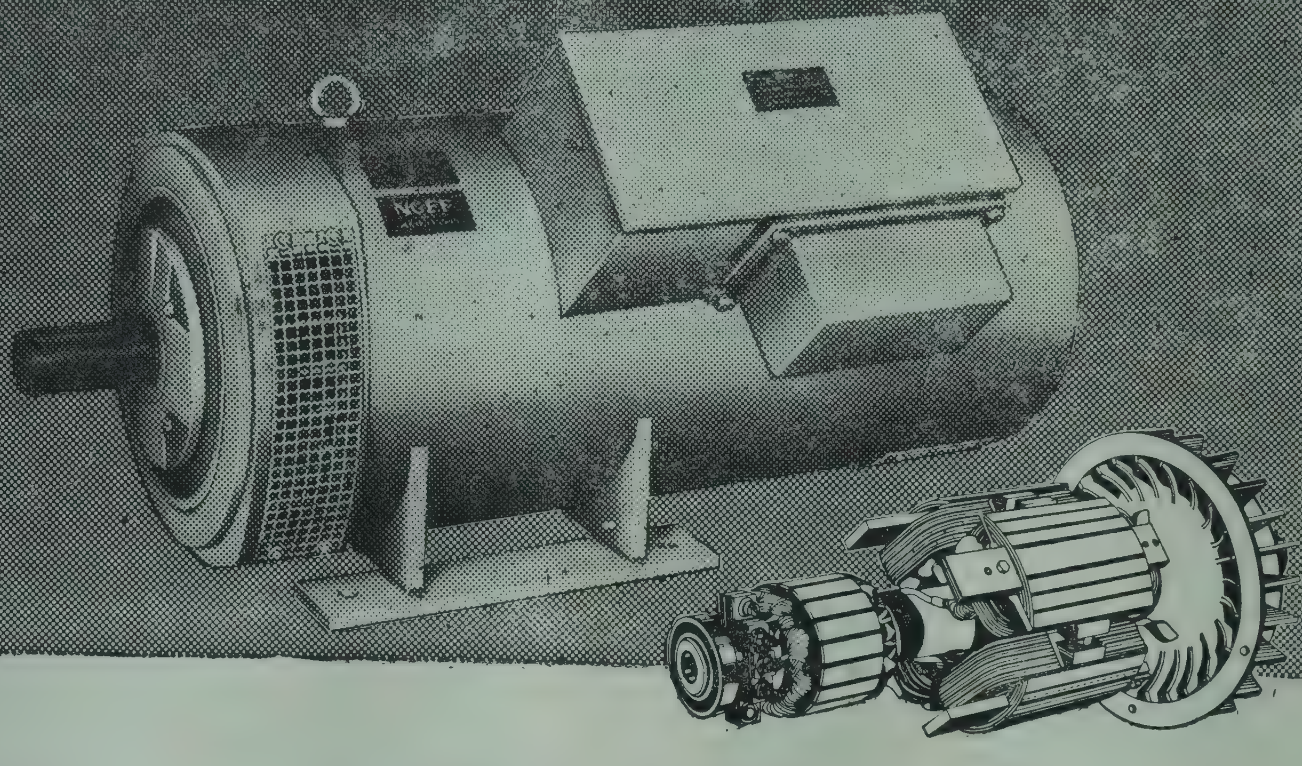

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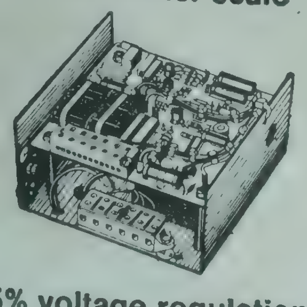

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Cheap foodgrains for urban areas

By ARVIND BHANDARI

DATELINE NEW DELHI

NOW that the fall-out of controversy over import of foodgrains is beginning to settle, it would be worthwhile to have a look at the public distribution system to sustain which the controversial decision is supposed to have been taken. In the initial stages the system had some meaning. It was introduced in the wake of the Bengal famine of 1943, and continued into the post-war and immediate post-independence period in view of the prevailing food shortage in the country. After the improvement in the food situation in 1955, when all restrictions on zonal movement of foodgrains were removed, the system could have been dismantled, but it was not. As the PL-480 grain arrived in shiploads in 1956 the existing network of fair price and ration shops came in handy to serve as a conduit for distribution and absorption of the imported grain at throwaway prices. Thus a system introduced originally to relieve genuine distress became an instrument for pampering the urban classes by providing them with cheap foodgrains. Since then, because of political considerations and despite the green revolution, the humbug continues to be perpetrated in the name of food security. It is worth reflecting whether the country can afford to provide subsidised foodgrains to four-figure and five-figure income earners who, according to various reports, have been the main beneficiaries of the public distribution system. The Government should no doubt keep an emergency buffer for unforeseen contingencies. It could with equal justification procure foodgrains for the Food-for-Work Programme in order to bring food within the reach of the millions who have no money to buy it. Perhaps there is also a case for providing subsidised foodgrains to those with an income up to, say, Rs 600. Rest of the apparatus should be dismantled. This would, roughly speaking, halve the quantity required to be procured by the Government and it could be taken in the form of a levy, either on the farmer or on the wholesaler. Lessening of governmental interference in the foodgrains market would enable determination of natural prices which, considering the improvement in production and, therefore, supplies, could be expected to be not much higher than those prevailing. Natural prices, it can hardly be gainsaid, would also give a further fillip to production. The clamour for higher and higher procurement prices, with all the noisy politics involved, would become less deafening. The burden of food subsidy on the public exchequer would become lighter. The ignominy of food imports would be avoided. The costly functioning of the white elephant called the Food Corporation of India would be suitably truncated. In a recent letter to Mr Bhanu Pratap Singh, MP, the Finance Minister said : "The FCI is being allowed a cash credit for its foodgrains transactions at a concessional rate of interest by the banks. Besides, the Government has also given dividend-free support to the Corporation of the order of Rs 250 crores as on March 31, 1981." In case the task of collecting the food levy could be entrusted to state food departments the FCI could very well be wound up. Also worth examining is the feasibility of having, as in Japan, a centrally monitored national grid of small godowns run on co-operative principles. Apart from making up the existing lacuna in warehousing facilities, this would also reduce the cost of transportation of foodgrains.

Stoking inflation

Consistency, goes the aphorism, is the hobgoblin of weak minds. Little wonder, therefore, that the Government has opted for such mental strength that one can virtually detect no method in its madness. Of the various economy-watchers I have spoken to in the last few weeks not one disagrees that the net result of the measures taken by the Government in the name of inflation would be to exacerbate inflation. Asked as to the rationale behind the hike in the prices of petroleum products, a highly-placed source in the Petroleum Ministry candidly said : "For various reasons, including failure of the bearer bonds scheme, they needed money." If it is money they needed, was it necessary to adopt a method that has stoked inflation, further squeezed the common man and slowed down the economy, if not actually caused stagflation?' Since it is being said that one of the main purposes for which the additional money is being raised is the financing of oil exploration, there is a strong opinion that a comparatively less burdensome method would have been to simply raise the Rs 1,000-odd crores in the international money market. If governmental behaviour lacks method, it betrays a surfeit of make-believe—or hypocrisy. Not a day passes when some minister or the other does not, like a modern-day Don Quixote, tilt at the black money windmill, blaming the scourge for the inflation and prescribing his own little remedy for it. But none of the ministerial sermonisers has the guts and the gumption to even indirectly admit the underlying nexus between black money and politics. Mr Morarji Desai asserted in Bhopal a few days ago : Corruption among politicians is the main factor responsible for the rising prices. They accept money from business houses and then leave them free to earn as much as they like from the common consumer." This may be too simplistic an explanation for the soaring price graph, but it does contain an element of truth, especially in a set-up that is riddled with controls. Last October there were widespread reports of a secret understanding between Gujarat groundnut oil manufacturers and the state's politicians who looked the other way when vanaspati rates were jacked up to scandalous levels. During the past few months there has been much talk of collusion between certain leaders of the ruling party and sugar magnates. Again, had it not been for active complicity between cement distributors and influential people at various levels, this commodity would not have freely sold in black market at fancy prices. Unless the Government of the day summons up the will power and tenacity of purpose to strike at the root of black money neither black money nor its contribution to inflationary fires can be lessened. This requires electoral reform, tax reform and a close examination of the system of controls. Mere tinkering with the problem short of this is akin to schoolboyish anxiety to mark attendance in a classroom.

BOOKS & IDEAS

Traditional items, the key to higher exports?

India's Export Performance—Some Policy Implications

By DR K. S. DHINDSA

Published by Intellectual Publishing House, 23 *Daryaganj, New Delhi*-110 002; *Pages* 243; *Price Rs* 70.

India has always been in the grip of tight balance of payments and, with the oil crisis, it has become really imperative that the foreign exchange reserves be in surplus so as to meet any eventuality. Needless to say this would enable India to accelerate its pace of industrialisation and economic growth. But then the foreign exchange position can be in surplus only if India is able to export more than what it imported. How best are we to increase our exports and keep down the imports to the barest minimum? This question has engaged the attention of policy makers and administrators for quite sometime. Quite a lot of literature has also been written on the subject and many suggestions offered to improve our export performance.

However, the publication under review looks at the problem in a different way. According to the author, export performance could be improved only by effecting a substantial improvement in the earnings from the traditional export commodities such as tea, cotton textiles and jute manufactures. Scrutinising the export performance of these traditional commodities over the last three decades, he has pointed out how very important these items are, as even a slight decrease in their exports would adversely affect the earnings of the country. The importance of monitoring their export trends with caution to keep them competitive in the world market is thus of paramount consideration.

Beginning with a bird's eye-view of India's foreign trade and their trends, the author has highlighted the export pattern of traditional commodities. He has tried to identify the major causes of decline or slow growth in the export of each of these commodities and his detailed analysis makes an interesting reading.

The aim of India's trade agreements, he has pointed out, has always been to obtain capital goods and raw materials without straining foreign exchange resources, creating markets for non-traditional export goods, reducing dependence on traditional export markets, and stabilisation of prices of traditional exports. Terms of trade agreements usually go against the economically weaker nations and hence the imperative need for strengthening the export base.

In his study, Dr Dhindsa has analysed the data from 1950 to 1972 and in some cases until 1978. While admitting the fact that owing to non-availability of data in some cases, the discussion would not be complete or up to date, he has tried to incorporate the latest figures, wherever available, to prove his points. The publication, it may be stated, is a revised version of the author's doctoral dissertation submitted to the University of London in 1975. The study covers the period 1950 to 1977 and is based on data available from published sources.

He has given several tables to substantiate his analysis and conclusions and inferences drawn therein have been quoted from valuable sources like *Statistical Abstract* and *Monthly Statistics of Foreign Trade*—Central Statistical Organisation; *Report on Currency & Finance* and *Reserve Bank of India Bulletin, International Financial Statistics*—IMF; *FAO Commodity Review & Outlook.* various plan documents, etc.

The determinants of export performance in various countries have been reviewed in the recent study. The author has specifically thrown light on two main schools of thought and discussed their theories. One is that of Professor Nurkse who was an ardent advocate of the demand deficiency thesis, taking trade as an engine of growth in the nineteenth century as discussed by him in his book *Patterns of Trade and Development*. On the other hand, Prof A. K. Cairncross supported the supply deficiency thesis in his book *International Trade and Economic Development.* He has reviewed the literature on this subject and concluded that several factors such as relative prices, export taxes, export credit facilities, non-price factors like quality, regularity of export supplies, export marketing services, after sales services, etc and internal and external demand are mainly responsible for export performance in association with demand and supply forces.

The author has then created an export model with two hypothesis. He first analyses world exports of each major traditional commodity and then reviews India's share of these commodities followed by critical analysis of decline in world exports and possible remedies. He has not only critically reviewed the decline but also thrown light on possible remedial measures and future outlook which add to the utility and usefulness of the publication.

One chapter is devoted to summarising statistical results and enunciating policy implications which are an outcome of the analysis, for the benefit of decision-makers, while another chapter puts forth some broad action plans that ought to be taken to promote trade in tea, cotton textiles and jute manufactures, keeping in view the prospects of world market. Some policy implications derived from the study are increasing relative profitability of foreign sales by removing export taxes and central excise duty, etc, promote quality of traditional exports by incentives and subsidies, undertake intensive publicity campaigns, intensify research and development efforts in traditional commodities, etc.

The inclusion of an exhaustive bibliography of important works consulted and which have provided an important insight to the author in crystallising the ideas which have gone into the study would prove to be very helpful to future researchers on the subject. The study is a useful publication not only for the boards and associations of the traditional commodities *viz* tea, cotton textiles and jute manufactures but also for researchers and students, as also for bodies such as FICCI, export promotion councils and other institutions interested in export trade.

The last chapter on "Future Prospects" neatly summarises the position on the export front, especially in the case of the traditional commodities, and suggests measures for improving them. One cannot but agree with the author when he says that to boost exports of cotton textiles and jute goods, due attention should be given to restrain domestic consumption of superfine cloth and cut production costs of the latter. Further, both cotton textiles and jute goods have to face effective competition from synthetic substitutes. But then, the question basically is how much one can reduce costs, lower domestic consumption and improve quality. The publication, however, does not throw light on this.

The book is a welcome addition to the literature in the market and is bound to be useful for both the policy maker as well as the researcher.

Raghu

Growth of urban cooperative banks

Statistical Data on Economic Position of Urban Cooperative Banks in Maharashtra for 1979-80 (Marathi)

*Published by The Maharashtra State Cooperative Banks Association Ltd, Oricon House, K. Dubhash Marg, Bombay-*400 023.

There were 325 urban cooperative banks with a total branch network of 497 in Maharashtra at the end of June 30, 1980. In the 1979-80 cooperative year the number of branches went up by 67, and of them 90 per cent were in western Maharashtra alone. Of the 325 urban cooperative banks, 219 were in audit group A, 69 in group B and 11 in group C. The dispersal of 325 banks was as follows : western Maharashtra 287, Vidarbha 28 and Marathwada 10.

This information is brought forth by the publication under review. Among other salient information mention can be made of the following :— the number of regular members of urban cooperative banks rose 21.8 per cent to 13.22 lakhs as on June 30, 1980; deposits went up to Rs 486.38 crores by about 26.8 per cent, and of this increase in deposits 45.7 per cent was in time deposits and 33.6 per cent in savings deposits. The number of banks with deposits of over Rs 2 crores rose from 39 to 49 during the period, while those with deposits of rupees one crore to two crores increased from 34 to 53. However, those between Rs 51 lakhs and rupees one crore declined from 63 to 54, indicating that more banks from this group moved up to the next group.

A lot of valuable data are presented over nine tables giving the position district-wise, bank-wise, deposits-wise, etc, etc. A really useful reference publication indeed.

The wings of progress

AIR transport can contribute vitally to the Third World development, according to Dr Assad Kotaite, president of the Council of the International Civil Aviation Organisation (ICAO). In an article in the *Development Forum,* published by the United Nations University and the Division of Economic and Social Information, Mr Kotaite said : "It has been said with some justification that a mile of road leads nowhere but a mile of runway can lead anywhere. Surface transport systems in many countries of Latin America, Asia and Africa are severely limited, with unpaved roads often subject to wash-outs during the rainy season and unsuitable for heavy trucks. Lending agencies such as the World Bank and the International Development Association (IDA) are well aware of these deficiencies and are making great efforts to correct them. But the task is formidable and the conclusion inevitable that — at least over the medium term — it may be more economical in many instances to use air instead of surface transport for carriage of certain consignments even though the air freight rate is much higher than the surface rate.

Dr Kotaite adds : "The trend is unmistakable. During the past three decades, civil aviation has emerged as an important and flexible instrument of national development policy. For the medium and longhaul carriage of passengers on international and domestic routes, air transport has become established as the dominant mode. For a growing number of countries, it accounts in terms of value for a significant and rising share of freight movements. Air transport is frequently the only reliable means of access to remote or geographically isolated areas. Aerial work (crop-spraying, aerial photography, medical evacuation) and general aviation are also important domestic activities.

"Civil aviation is one of the few areas of economic activity in which the Third World, is, in many ways, catching up with the industrialised countries. A few figures will prove the point. More than half of the world's airlines and international airports belong to developing countries. The share of world traffic carried by the airlines of the developing world has increased steadily — from 17 per cent in 1969 to 24 per cent in 1979. The highest average annual rates of growth were recorded by the airlines of developing countries in Asia and the Pacific (20 per cent), the Middle East (18.4 per cent), Africa (13.4 per cent) and Latin America and the Caribbean (12.4 per cent).

"This is a great achievement by developing countries, for many of them had to start their aviation development after reaching independence. Nonetheless, figures reveal also that they still have a long way to go. Putting it in another way : all airlines registered in Africa and the Middle East carried less scheduled passenger traffic on their international and domestic routes than the largest single United States airline."

BOOKS RECEIVED

Commodity Trade Statistics 1976—Statistical Papers Series D Vol xxvi, No. 1-21, United Nations Publications may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 266; Price $ US 4.00

Commodity Trade Statistics 1977—Statistical Papers Series D Vol xxvii, No. 1-20, United Nations Publications which is obtained from : United Nations Sales Section, New York or Geneva; Pages 233, Price $ US 4.

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Arrested growth of chemical industry

By P. C. MAHANTI

EASTERN INDIA TODAY

IT is an oft heard complaint in local industrial circles today that while the western region has achieved considerable progress in the production of basic organic chemicals, pharmaceuticals, dyestuffs, high polymers, solvents, insecticides and pesticides, the eastern region has been conspicuously lagging behind. The region consumes as much as 20 to 25 per cent of these products but produces only a small part of what it requires. The production of chemicals in the region has indeed been insignificant.

The reasons for the slow growth of the chemicals industry in the region are several. As Mr B. A. Nagari, president of the Indian Chemical Merchants' and Manufacturers' Association, Calcutta, has enumerated, the factors are broadly the energy crisis, the oil crisis, inadequate supply of industrial raw materials, coal and wagon shortages and high cost of bank credit. Not only have these factors inhibited the growth of new units but even kept a good deal of the installed capacity underutilised. In the plastics industry of the region, for instance, only 57 per cent of the capacity is being utilised. When the olefin complex of the Indian Petrochemicals Corporation went into operation expectations were aroused that the processing of thermo-plastics like low density polythene, high density polythene, polypropylene and PVC would start on a large scale but these expectations have not materialised in any worthwhile sense.

A joint committee set up by a local chamber of commerce to study the possibilities and the potential of the development of chemicals and petrochemical industries in the region has pointed that the only way to get over the present limitations is to build up adequate capacities for heavy organic and inorganic chemicals, basic drugs, dyestuffs and intermediates and pesticides etc. The region does produce a wide variety of chemicals like caustic soda, sulphuric acid, alum, nitric, some fertilisers and some pharmaceuticals including formulations but the quantities in each case are small even to meet the region's need to any appreciable extent.

The committee has suggested that with the resources available in the region it is possible to develop organic chemicals industry. The sick textile industry of the region very much depends on the starting of a dyestuffs and intermediate industry. As for drugs and pharmaceuticals, the eastern region is currently producing only half of what it requires. Out of 64 important drugs and formulations units only seven are located in the eastern region and even then their raw materials are not timely and adequately available. The development of coal tar and allied chemical industries will greatly overcome this problem.

The eastern region grows a variety of cash and plantation crops like jute and tea which need a large quantity of pesticides. As for synthetic detergent units these are beginning to get an impetus from the factory put up in Haldia by Hindustan Lever and in due course the eastern region is likely to develop as an important detergent production centre.

Power crisis

The power problem in West Bengal has become intractable despite what the State Ministry may say. This week for four days (between July 22 and July 25) high tension power consuming industries have been asked to cut their consumption by 50 per cent, priority industries and continuous process plants being the only exceptions. The order came so suddenly that the industrialists were taken by complete surprise and naturally very annoyed that they were not allowed sufficient time to prepare themselves for such a drastic cut. The reason for the cut is the shutdown of a 50 mw unit by the Calcutta Electric Supply Corporation. With the DVC supply being erratic and that by Durgapur Projects practically nothing, the State Government probably had no choice but to impose the cut especially when supplies to domestic consumers have been less than the minimum required. But the point is that could not the power department have taken the major industrial consumers into confidence before taking the step?

The Chief Minister, Mr Jyoti Basu, requested his counterpart in Orissa for a 50 mw power supply for the days that the Calcutta Electric Supply Corporation unit would be down for repairs. With its own position however none too comfortable at the moment, Orissa did not oblige. Mr Basu thereafter requested the Central Energy Minister, Mr Ghani Khan Chaudhury to use his influence. Orissa did at last respond to West Bengal's SOS for some power, but not until the Central Power Minister had intervened. A supply of 30 mw has been promised for five days from July 26 as against 50 mw requested. One expected greater neighbourly co-operation between the two states in the same region no matter which political party ruled where when there is a serious power crisis to be expeditiously tackled.

Objection to ONGC

An interesting commentary on the notion that some of our states and ministers have of their autonomy, whether or not guaranteed by the constitution, is provided by Nagaland recently. While the example shown by Assam is being written into history Nagaland looks like emulating that neighbour. It is objecting to the Oil and Natural Gas Commission exploring oil within the State's territory on the ground that no resolution of the State Assembly has authorised the Commission to do oil exploration here. In doing this the State Government is falling back on Article 321(E) of the constitution which says that "no transfer of land and resources of Nagaland can be made without a resolution passed by the State Assembly".

There are possibilities of a substantial oil discovery in the State. In fact the Commission has already struck oil in the Changhang area of Workha district. It is in national interest that oil resources wherever they are found in the country should be explored and exploited by national agencies like the Oil and Natural Gas Commission. Moreover the constitution also lays down that resources found under the earth fall under the control of the Central Government and as such do not belong to the land or resources that the Article 371(E) visualises. If there is a conflict between the two constitutional provisions, national interest should harmonise it.

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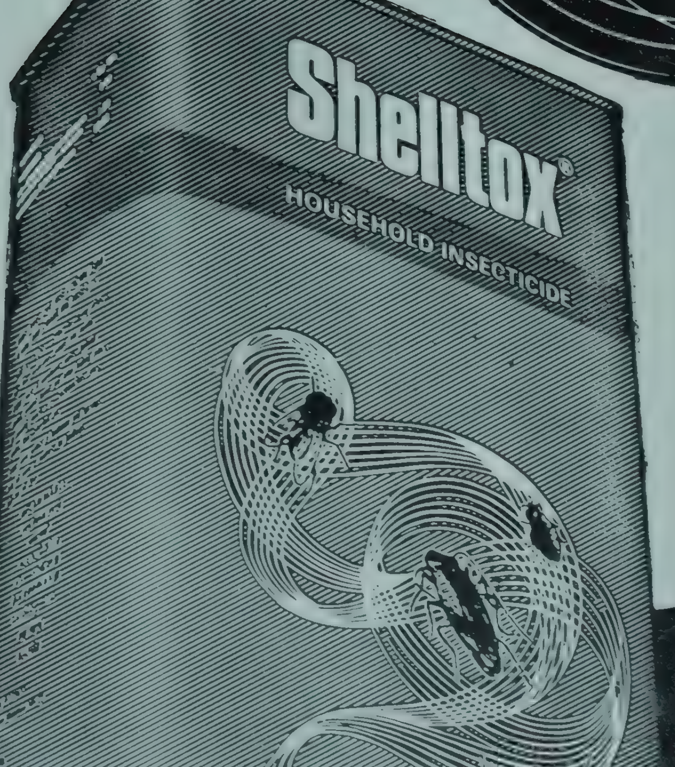

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Text of ordinance on maintenance of essential services

THE following is the text of the Essential Services Maintenance Ordinance, 1981, *promulgated by the President on July* 27, 1981 :

1. (1) This ordinance may be called the Essential Services Maintenance Ordinance, 1981.

(2) It extends to the whole of India : Provide that it shall not apply to the state of Jammu and Kashmir in so far as it related to any essential service connected with matters with respect to which Parliament has now power to make law for that state.

(3) It shall come into force at once.

2. (1) In this ordinance, unless the context otherwise requires,—

(A) "Essential Service" means :—

(i) Any postal, telegraph or telephone service, including any service connected therewith;

(ii) Any railway service or any transport service for the carriage of passengers or goods by air or any other transport service for the carriage of passengers or goods by land or water with respect to which Parliament has power to make laws;

(iii) Any service connected with the operation or maintenance of aerodromes, or with the operation, repair or maintenance of aircraft, or any service in the International Airport Authority of India constituted under section 3 of the International Airports Authority Act, 1971;

(iv) Any service in, or in connection with the working of any major port, including any service connected with the loading, unloading, movement or storage of goods in any such port;

(v) Any service connected with the clearance of goods or passengers through the customs or with the prevention of smuggling;

(vi) Any service in any establishment of, or connected with, the armed forces of the Union or in any other establishments or installations connected with defence;

(vii) Any service in any section of any industrial undertaking pertaining to a scheduled industry on the working of which the safety of such undertaking or the employees employed therein depends:

Explanation : For the purposes of this sub-clause, the expressions "industrial undertaking" and "scheduled industry" shall have the meanings respectively assigned to them in clauses (D) and (i) of section 3 of the Industries (Development and Regulation) Act, 1951;

(viii) Any service in, or in connection with, the working of any undertaking owned or controlled by the Central government being an undertaking engaged in the purchase, procurement, storage, supply or distribution of foodgrains;

(ix) Any service in, or in connection with the working of, any system of public conservancy or sanitation, hospitals or dispensaries in any Union territory, cantonment area or undertaking owned or controlled by the Central government.

(x) Any service in connection with or in relation to banking;

(xi) Any service in any oilfield or refinery or in any establishment or undertaking dealing with the production, supply or distribution of petroleum and petroleum products;

(xii) Any service in any mint or security press;

(xiii) Any service in connection with the election to Parliament or to the legislatures of the states;

(xiv) Any service in connection with the affairs of the Union, not being a service specified in any of the foregoing sub-clauses;

(xv) Any other service connected with matters with respect to which Parliament has power to make laws and which the Central government being of opinion that strikes therein would prejudically affect the maintenance of any public utility service, the public safety or the maintenance of supplies and services necessary for the life of the community or would result in the infliction of grave hardship on the community, may, be notification in the official Gazette, declare to be an essential service for the purposes of this ordinance.

(B) "Strike" means the cessation of work by a body of persons employed in any essential service acting in combination or a concerted refusal or a refusal under a common understanding of any number of persons who are or have been so employed to continue to work or to accept employment, and includes—

(i) Refusal to work overtime where such work is necessary for the maintenance of any essential service.

(ii) Any other conduct which is likely to result in, or results in cessation or substantial retardation of work in any essential service.

(iii) Any reference in this ordinance to any law which is not in force in any area and to any authority under such law shall, in relation to that area, be construed as a reference to the corresponding law in force in that area and to the corresponding authority under such corresponding law.

(iv) Every notification issued under sub-clause (xv) of clause (A) of sub-section (1) shall be laid before each house of Parliament immediately after it is made if it is in session and on the first day of the commencement of the next session of the house if it is not in session and shall cease to operate at the expiration of 40 days from the date of its being so laid or from the reassembly of Parliament, as the case may be, unless before the expiration of that period a resolution approving the issue of the notification is passed by both houses of Parliament.

Explanation : Where the houses of Parliament are summoned to reassemble on different dates, the period of 40 days shall be reckoned from the later of those dates.

3. (1) If the Central government is satisfied that in the public interest it is necessary or expedient so to do, it may, by general or special order, prohibit strikes in any essential service specified in the order.

(2) An order made under sub-section (1) shall be published in such manner as the Central government considers best calculated to bring it to the notice of the persons affected by the order.

(3) An order made under sub-section (1) shall be in force for six months only, but the Central govern-

ment may, by a like order, extend it for any period not exceeding six months if it is satisfied that in the public interest it is necessary or expedient so to do.

(4) Upon the issue of an order under sub-section (1)—

(A) No person employed in any essential service to which the order relates shall go or remain on strike.

(B) Any strike declared or commenced whether before or after the issue of the order by persons employed in any service shall be illegal.

4. Any persons :—

(A) Who commences a strike which is illegal under this ordinance or goes or remains on, or otherwise takes part in, any such strike; or

(B) Who instigates or incites other persons to commence, or go or remain on, or otherwise take part in, any such strike, shall be liable to disciplinary action (including dismissal).

In accordance with the same provisions as are applicable for the purpose of taking such disciplinary action (including) dismissal on any other ground under the terms and conditions of service applicable to him in relation to his employment.

5. Any person who commences a strike which is illegal under the ordinance or goes or remains on, or otherwise takes part in, any such strike shall be punishable with imprisonment for a term which may extend to six months or with fine which may extend to Rs 1,000 or with both.

6. Any person who instigates or incities other persons to take part in, or otherwise acts in furtherance of, a strike which is illegal under this ordinance shall be punishable with imprisonment for a term which may extend to one year, or with fine which may extend to Rs 2,000 or with both.

7. Any person who knowingly expends or supplies any money in furtherance or support of a strike which is illegal under this ordinance shall be punishable with imprisonment for a term which may extend to one year, or with fine which may extend to Rs 2,000, or with both.

8. Notwithstanding anything contained in the code of Criminal Procedure, 1973, any police officer may arrest without warrant any person who is reasonably suspected of having committed any offence under this ordinance.

9. Notwithstanding anything contained in the Code of Criminal Procedure 1973, all offences under this ordinance shall be tried in a summary way by any metropolitan magistrate, or any judicial magistrate of the first class specially empowered in this behalf by the state government and the provisions of sections 262 to 265 (both inclusive) of the said code shall, as far as may be, apply to such trial.

Provided that in a case of conviction for any offence in a summary trial under this section, it shall be lawful for the magistrate to pass a sentence of imprisonment for any term for which offence is punishable under this ordinace.

10. The provision of this ordinance and of any order issued thereunder shall have effect notwithstanding anything inconsistent therewith contained in the Industrial Disputes Act, 1947 or in any other law for the time being in force.

11. During the continuance in force of this ordinance, the Essential Services Maintenance (Assam) Act 1980, shall have effect as if—

(A) in sub section (1)—

(i) clause (A) had been omitted;

(ii) for clause (B) the following clauses had been substituted, namely :

(B) Essential service means :

(i) Any transport service for the carriage of passengers or goods, by land or water, with respect to which the legislative assembly of the state of Assam has power to make laws;

(ii) Any service connected with the production, storage, supply or distribution, as the case may be, of gas or water;

(iii) Any service connected with the maintenance of public health and sanitation, including hospitals and dispensaries;

(iv) Any public services and posts in connection with the affairs of the state, and also persons appointed to the secretarial staff of the legislative assembly of the State of Assam;

(v) Any other service or employment or class thereof, connected with matters with respect to which the legislative assembly of the State of Assam has power to make laws and which the state government being of opinion that stirkes therein would prejudicially affect the maintenance of any public utility service, the public safety or the maintenance of the supplies and services necessary for the life of the community, may, by notification in the official Gazette declare to be an essential service for the purpose of this act.

(BB) "State Government" means the state government of Assam :

(2) In sub-section (2) for the words brackets and figures "under subclause (v) had been substituted.

(B) In sections 3 and 9 for the words "appropriate government", wherever they occur, the words "state government" had been substituted.

Ottawa summit

The following are excerpts from the communique issued at the end of the summit meeting at Ottawa of seven leading nations—Canada, France, Italy, Japan, West Germany, the UK, and the US :

WE support the stability, independence and genuine non-alignment of developing countries and reaffirm our commitment to co-operate with them in a spirit of mutual interest, respect and benefit, recognising the reality of our interdependence.

It is in our interest as well as in theirs that the developing countries should grow and flourish and play a full part in the international economic system commensurate with their capabilities and responsibilities and become more closely integrated it.

We look forward to constructive and substantive discussions with them, and believe the Cancun summit offers an early opportunity to address our common problems anew.

We are committed to maintaining substantial and, in many cases, growing levels of official development assistance and we will direct the major portion of our aid to poorer countries, and will participate actively in the United Nations Conference on the Least Developed Countries.

We point out that the strengthening of our own economies, increasing access to our markets, and removing impediments to capital flows contribute larger amounts of needed resources and technology and thereby complement official aid. The flow of private capital will be further encouraged in so far as the developing countries themselves provide assurances for the protection and security of investments.

The Soviet Union and its partners, whose contributions are meagre, should make more development assistance available, and take a greater share of exports of developing countries, while respecting their independence and non-alignment.

We will maintain a strong commitment to the international financial institutions and work to insure that

19 AUG 1981
C.F.T.R.I., MYSORE

they have, and use effectively, the financial resources for their important responsibilities.

We attach high priority to the resolution of the problems created for the non-oil developing countries by the damaging effects on them of the high cost of energy imports following the two oil price shocks. We call on the surplus oil-exporting countries to broaden their valuable efforts to finance development in non-oil developing countries, especially in the field of energy. We stand ready to co-operate with them, in a spirit of partnership, possible mechanisms, such as those being examined in the World Bank, which would take due account of the importance of their financial contributions.

We recognise the importance of accelerated food production in the developing world and of greater world food security, and the need for developing countries to pursue sound agricultural and food policies. We will examine ways to make increased resources available for these purposes.

We reaffirm our strong commitment to maintaining liberal trade policies and to the effective operation of an open multilateral trading system as embodied in the GATT.

We will work together to strengthen this system in the interest of all trading countries, recognising that this will involve structural adaptation to changes in the world economy.

We will implement the agreements reached in the multilateral trade negotiations and invite other countries, particularly developing countries, to join in these mutually beneficial trading arrangements.

We will continue to resist protectionist pressures, since we recognise that any protectionist measure, whether in the form of overt or hidden trade restrictions or in the form of subsidies to prop up declining industries, not only undermines the dynamism of our economies but also, over a period of time aggravates inflation and unemployment.

We welcome the new initiatives represented by the proposal of the consultative group of eighteen that the GATT contracting parties convene a meeting at ministerial level during 1982, as well as that of the OECD countries in their programme of study to examine trade issues.

We will keep under close review the role played by our countries in the smooth functioning of the multilateral trading system with a view to ensuring maximum openness of our markets in a spirit of reciprocity, while allowing for the safeguard measures provided for in the GATT.

We endorse efforts to reach agreement by the end of this year on reducing subsidy element in official export credit schemes.

Slower recovery for industrial countries

THE *OECD Economic Outlook* for July 1981 foresees a much slower recovery for the economies of the developed countries than envisaged six months earlier in December 1980. The recovery is now expected to take six months more to begin by December 1981—with important differences in the rates of growth in Europe, Japan and the United States.

In Europe, partly because of important exchange rate changes and tighter monetary policy, output in the bigger countries could decline by about 1 per cent this year, before growing by 1½ per cent in 1982, helped by a depreciation-assisted boost to exports. In Japan, GNP may grow at about 3-3½ per cent until next year, when it could accelerate. The outlook for the United States is subject to more than usual uncertainty. The OECD forecast is that the recent buoyancy will give way to only modest growth, accelerating through the ½-2½ per cent range during 1982, with continuing high interest rates moderating the recovery. Should inflation slow more quickly than in this forecast, growth could be correspondingly more buoyant, particularly next year. Published forecasts from other sources range from growth rates below those of the OECD to real growth for 1982 in the region of 5 per cent, which is the outcome foreseen by the United States Administration.

Unemployment on these projections will rise in most countries throughout the next eighteen months, perhaps from the present rate of just under 7 per cent of the labour force to nearly 7½ per cent, some 26 million-people, by the second half of 1982. In Europe the rate could be over 9 per cent. The unemployment rates of relatively disadvantaged groups will be even higher; youth unemployment in some European countries may top 20 per cent.

Inflation: As the oil price pulse and its subsequent price effects gradually dwindle, the annual rate of inflation should, on that count, drop progressively. Weak commodity prices, a quiescent oil market in coming months and moderating wage growth should assist this. Taking all the main factors into account, the outlook is for a progressive deceleration of OECD consumer price inflation, from a rate of around 10 per cent (annual rate) in the first half of this year to about 8½ per cent in the second half of 1982. The divergence between countries is likely to be considerable: among the larger countries, inflation in Germany could be around 3½ per cent in the latter part of next year, whereas in Canada the rate could still be 10 per cent, and in Italy about 15 per cent. And of the smaller countries, half seem likely to have double-digit inflation by the end of next year, while a few may succeed in bringing inflation down to around 5 per cent.

Current balances: The 1981 current deficit for the OECD area should

Growth of real GNP/GDP

Percentage changes seasonally adjusted at annual rates

	From previous year			From previous half-year			
	1980	1981	1982	1981 I	1981 II	1982 I	1982 II
United States	−0.2	2½	1	5	½	½	2½
Japan	4.2	3½	4	3½	3	4	5
Four major European countries	1.3	—1	1½	—½	—½	2	2¾
Other OECD countries	1.6	1½	2¾	1½	2	3	3¼
Total OECD	1.3	1¾	2	2½	1	2	3

be lower than in 1980. Differential GNP growth rates, in combination with past movements in competitive positions, could lead to an increased dispersion of current account positions this year. Next year, however, as the lagged adjustment of trade volumes to the recent exchange rate changes becomes important, the dispersion of current account positions of major countries could narrow considerably. Germany, which now has the biggest current account deficit, could well see a significant improvement. On present evidence none of the major countries seems likely to have a 1982 deficit much larger than $5 billion. The smaller OECD countries will take a bigger share of the area deficit—perhaps between $25 and $30 billion.

Overall the OECD area deficit may fall by around $30 billion between 1980 and 1982. The OPEC current surplus seems likely to fall somewhat, from about $110 billion this year to a still-substantial $60-70 billion next year. The decline is being slowed by the European currency depreciation, which improves OPEC's terms of trade.

The deficit of the developing countries, by contrast, seems likely to increase this year, perhaps by around $10 billion, and is unlikely to fall in 1982. This projection is based on a cautious view of the finance likely to be available to developing countries. If financing were to be more or less restricted than assumed, developing country imports would alter accordingly.

It is necessary to resist, in this transitional period of slow growth, protectionist or market-weakening measures. Unfortunately, a plethora of inappropriate incentives to export, sometimes in combination with disincentives to import, becomes increasingly tempting. The situation may be exacerbated to the extent that the protection of domestic industry offsets the positive effects on inflation that might be expected when demand is weak, and interferes with desirable medium-term structural change by reducing competition among enterprises.

Experience shows that direct intervention in price and wage formation may simply create distortions and pent-up inflationary pressures. It remains true, however, that as well as resisting inflationary behaviour by non-accommodating financial policies, there is much to be said for trying to harmonise the income claims of business and labour in tune with available resources. In particular, increased awareness may be necessary where there is reduced scope for increases in private real incomes, given reduced growth potential, worsened terms of trade, rising public expenditure or the need to improve profitability and productive investment.

Boosting investment in physical and humans capital must be a key objective of economic policy in most countries to assure both the more vigorous expansion of productive potential and the creation of adequate new employment opportunities. Such an expansion may, however, be difficult to achieve in circumstances of relatively weak demand growth and hence limited pressure on existing productive capacity. Nevertheless, the change in the relative price of energy may in some countries provide an incentive to invest. Moreover there is evidence that stimuli working through the expected rate of return to enterprises can have a significant effect on investment even in the absence of strong demand pressures. A restructuring of fiscal systems where they weigh against investment—particularly through distortions associated with the effects of inflation on company profits—might be the most promising approach. Temporary or targeted measures may also have some scope, though such actions probably have stronger effects on the timing of investment than on the total undertaken, and may introduce administrative distortions.

THE STANDARD MILLS COMPANY LIMITED

Registered Office : Mafatlal Centre, Nariman Point
Bombay 400 021.

NOTICE is hereby given that the EIGHTYSIXTH ANNUAL GENERAL MEETING of the Members of THE STANDARD MILLS COMPANY LIMITED, will be held at Patkar Hall of S.N. D.T. Women's University, 1, Nathibai Thackersey Road, Bombay-400 020, on Tuesday, the 1st September, 1981, at 3-00 P.M. to transact the Ordinary and Special Business set out in the NOTICE dated 14th July, 1981.

The said Notice dated 14th July, 1981, along with the relevant Explanatory Statement pursuant to Section 173 of the Companies Act, 1956, and the Annual Report and Statements of Accounts for the financial year ended 31st March, 1981, are being posted to the Members individually at their registered addresses.

Pursuant to the provisions of Section 194 of the Income-tax Act, 1961, Members (not being Companies) desiring to file Tax Exemption Certificates issued by the Income-tax Officer or Statements in Form No. 14-B (in duplicate), are requested to forward the same so as to reach the Company's Share Department at Rustom Building, 29, Veer Nariman Road, Bombay-400 023, on or before 12th August, 1981, in order to get the dividend without deduction of tax at source. Blank 14-B Forms will be supplied to the Shareholders on request.

NOTE : A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND A PROXY NEED NOT BE A MEMBER

By Order of the Board
B. D. DATAR
SECRETARY

Dated : 14th July, 1981

Potential output growth can also be damaged by loss of skills and reduced training, as well as by labour market inflexibilities which impede sustainable employment growth. Measures to improve the quality of training and the responsiveness of labour markets, which are also useful in the battle against inflation, have a role to play here. They might include reducing non-wage labour costs, targeting employment subsidies towards the marginal participants in the labour market, fostering labour mobility by transfer, retraining and housing policies, and reforming unemployment insurance schemes, apprenticeship schemes, training programmes and minimum wage laws.

Public sector : Reducing the share of public sector expenditure in GNP is in many countries a goal in its own right, but care may have to be taken to ensure that reductions in public expenditure do not weaken needed public investment, which too often proves to be the least difficult expenditure item to cut. Where expenditure cuts are appropriate they could to some extent be offset by tax cuts to stimulate saving, support demand or reduce prices. Furthermore, a review of governmental regulation could permit markets to operate more effectively, without significantly impairing the achievement of the goals currently sought by regulation.

COMMERCE
Vol. 143 No. 3659 Bombay, August 1, 1981

—A FEATURE

Textile Machinery: SLACKNESS IN DEMAND

A profile of textile machinery in India

By A SPECIAL CORRESPONDENT

THE textile machinery industry in India has made rapid progress in the manufacture of complete machinery as well as components and accessories in the last few years. There are about 100 machinery manufacturers in the large and medium scale sectors manufacturing complete machinery and over 250 manufacturers in the small scale sector manufacturing components and accessories. The industry's licensed capacity at current prices for complete machinery is estimated at Rs 360 crores and the installed capacity at Rs 240 crores. The industry has been producing machines not only for the cotton type of spinning system, but also for the other fibre groups like jute, wool, synthetics and man-made fibres, and natural silk. It produces the complete range of equipment required for spinning and spinning preparatory, weaving and weaving preparatory, processing and finishing operations. Besides, it also produces a number of electronic testing equipments and controls. Thus the industry is a comprehensive industry covering practically every need of the textile industry.

Years	Complete machinery (Rs crores)	Components/ accessories (Rs crores)
1975-76	80.39	53.96
1976-77	95.68	53.31
1977-78	89.53	54.02
1978-79	134.31	67.39
1979-80	170.00	70.00(I)
1980-81 (E) ..	200.00	90.00

The Indian textile machinery industry has entered a new era of sophistication. Most of the major machinery manufacturers have gone in for new collaboration agreements with reputed foreign machinery makers. Accent will definitely be on producing and supplying machinery of better quality, improved design, higher speeds and greater productivity. Following is a list of new collaborations, new technologies, and new items that would be made available to the user industry during the next two or three years :

Modernisation

The Indian textile machinery industry will be investing on expansion programmes and technological upgradation over Rs 100 crores in the next five

Name of Company	Collaboration with	Items to be manufactured
Spinning Preparatory and Spinning Machinery :		
(a) **Blow Reel Lines**		
1. Lakshmi Machine Works Ltd.	Rieters of Switzerland	Updating their blow room with aerefeeding system.
2. New Standard Engineering Co.	Schubert and Salzer, West Germany.	Updating their blow room incorporating direct chute feed system.
3. Trumac	Trutzschlera, West Germany.	Blow room lines with automatic chute feed system.
(b) **Cards**		
1. New Standard Engineering Co.	Schubert and Salzer, West Germany.	Super high speed cards with autoleveller and W/o autoleveller.
(c) **Draw frames**		
1. Machinery Manufacturers Corporation	Marzoli, Italy	Draw frames
2. Mafatlal Zinser	Zinser, West Germany	High speed draw frame
3. New Standard Engineering Co.	Schubert & Salzer, West Germany	High speed draw frame with and without autoleveller.
(d) **Combers**		
1. Mafatlal Engineering Industry Ltd.	VEB spinner, G D R	Combers with preparatory machinery.
2. Star Textile Engineering Works	Marzoli, Italy	Combers with preparatory machinery (production by end of this year).
e) **Speed frames**		
1. Machinery Manufacturers Corporation	Indigenous technology	Speed frame with suspended flyer system.
2. Mafatlal Zinser	Zinser, West Germany	N.S. speed frames.
(f) **Ring frames**		
1. Lakshmi Machine Works	Rieters, Switzerland	Latest model ring frames.
2. Machinery Manufacturers Corporation	Marzoli, Italy	Ring frame
3. New Standard Engineering Co.	Schubert and Salzer, West Germany	Ring frame
(g) **Open-end spinners**		
1. Lakshmi Machine Works	Czechoslovakia	Open-end spinning machinery
2. Mafatlal Engineering Industry Ltd.	SACM, France	Open-end spinning machinery
3 Star Textile Engineering Works	Indigenous know-how	Open-end spinning machinery

Name of Company	Collaboration with	Items to be manufactured	
Weaving and weaving preparatory machinery :			
(a) **Winders**			
1 Batliboi & Co.	Barber Coleman, U.S.A.	Automatic spooler	
2. Central India Machinery Mfg. Co. Ltd.	Karl Mayer- West Germany	Auto cone winding machinery	
3. Peass Industrial Engineers	Ott, West Germany	Precision cone winding	
(b) **Warpers**			
1. Batliboi & Co.	Barber Coleman	High speed warping machinery	
2. SLM Maneklal	Benninger, West Germany	High speed sectional warping	
(c) **Shuttleless looms**			
1. Central India Machinery Mfg. Co. Ltd.	Dornier, West Germany	Shuttleless looms	Rapier type.
2. Mafatlal Engineering Ind. Ltd.	SACM, France	Shuttleless looms	
3. Sen & Metienheimer	Investa Foreign Trade Co. Ltd., Baha.	Shuttleless looms	
Knitting machinery			
1. SLM Maneklal	Kombinat, G.D.R.	Warp knitting machinery	
2. Stibbi Raj.	Stibbi, U.K.	Sophisticated interlock knitting machinery	
Synthetic yarn processing machinery			
1. Himson Textile Engineering Ind.	Scragg, U.K.	Draw texturising	
2. Marehen Textile Ind.	Guidia, Italy	Texturising	
3 Star Textile Engineering Works	Volkmass, West Germany	Two-per-one twister	
Cotton textile processing finishing machinery			
1. SBM Engineering	Reggiani, Italy	Rotary/flat bed screen printing machine	
2. Shakti Textile Engineers	Meccane Textile, Italy	Rotary/flat bed screen printing machine	
3. Sherai Engineering Private Ltd.	Platt Longclose, U.K.	Complete range of ventura and soft flow fabric dyeing	
4. Sherai Engineering Private Ltd.	James Farma Norton, U.K.	Roller bed steamer	

years. The approximate break-up of the investments will be about Rs 70 crores in spinning and spinning preparatory, about Rs 20 crores in weaving and weaving preparatory and about Rs 35 crores in processing, finishing and other types of machinery. With these additional investments and expansions, the textile machinery industry's production programme for the next four years is expected to be as shown in the table on page 5.

The well known soft loan scheme floated by the Industrial Development Bank of India is more better known as the mill modernisation scheme. This was meant primarily to permit mills whose age worn machinery made them unprofitable to operate and this acted as a drag to the company's revenue earning efforts. This also proved a boon to Indian textile machinery manufacturers who coincidentally were having a slack period at the time the scheme went into operation. The order books of the machinery manufacturers soon filled and deliveries became the number one problem with complaints from customers that they took anything from two to five years. However, major manufacturers refuted this charge saying that they were able to deliver the goods within a year and a half at the most.

At present the order book position is comfortable through nothing to be ecstatic about. One of the reasons is

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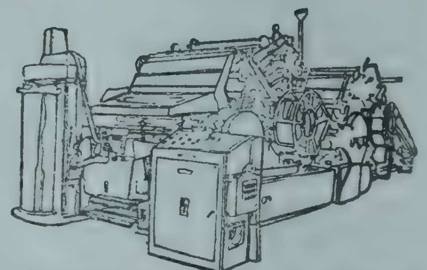
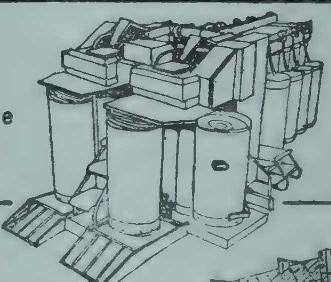
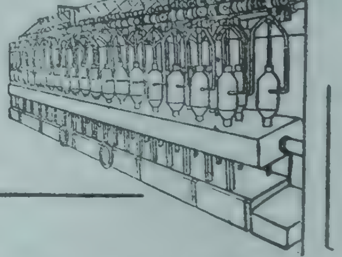


- MMC-Marzoli Draw Frame S-52
- MMC Whitin Accu-Draft Draw Frame



- MMC Speed Frame for cottons and synthetics
- MMC Speed Frame SF with 1400 rpm Suspended Flyers
- MMC Speed Frame S 3 Mark III for long staple fibres and worsteds



- MMC-Marzoli Ring Spinning Frame RC Type
- MMC-Marzoli Ring Twisting Frame TRC Type

ULKA-MMC-37B

that market conditions for the textile industry have taken a turn for the worse. Another is that quite a number of mills have already implemented the first phase of their modernisation programme. They were waiting to go in for the second phase which would take some time. Fresh applications for loans under the scheme have become fewer although this is not apparent from figures released by the Textile Machinery Manufacturers Association (India) (TMMA) which show that on March 31, 1981 243 applications worth Rs 358.76 crores were sanctioned as against 193 worth Rs 268.57 crores on the same day the year before.

A recent delegation of the TMMA to Bangladesh under the leadership of Mr Atul Bhagwati, chief of Associated Textile Engineers, arrived at the conclusion that a huge scope prevailed for the export of Indian textile machinery to Bangladesh because of its proximity, similar working conditions as in India and low cost of services.

In its report, however, the delegation cautioned against underestimating the competition from West Europe, Japan and China who were offering various facilities in payment and attractive prices on C & F basis.

The psychology of buyers in Bangladesh and the stage of development there, was nearly the same as what the machinery manufacturers faced in India during the fifties and early sixties. Frequently a small problem was exaggerated much more than its worth. Bangladesh being a smaller country and having major industrial development around Dacca and Chittagong, people came to know very fast about such problems. One of the cases of Indian supplies of velvet looms and processing equipment had been repeatedly posed to the delegation at all meetings.

In view of the huge expansion and modernisation programme that Bangladesh has planned, the TMMA has advised members to explore the possibility of manufacturing components, spare parts and simpler machines in Bangladesh under joint ventures or technical collaborations.

The report concluded that the Bangladesh market should be given special importance as far as the textile machinery industry was concerned so that full advantage could be taken of geographic proximity and similar working conditions.

The background to the visit of the delegation was reports that India's competitors in Europe and Japan were engaged in a subtle excercise in downgrading Indian textile machinery by exaggerating some minor problems connected with Indian machines. India has already supplied two complete spinning mills of 25,000 spindles each and balancing machinery for two other mills. In Bangladesh, all the spinning mills and composite mills are nationalised and managed by the Bangladesh Textile Mills Corporation (BTMC). The government has now planned to set up 33 spinning mills each of 12,500 spindles. 30 mills would be permitted to be set up in the private sector and three mills would come up under the aegis of the BTMC. As Poland, Romania, the UK, West Germany, Japan were known to be offering lines of credit even on a government to government basis, the TMMA pursuaded the Industrial Development Bank of India to offer a line of credit up to Rs 15 crores.

Gold-mine in the Philippines?

Another delegation to the Philippines, Hongkong, Taiwan and Bangkok came away with considerably less optimism than the one which went to Bangladesh for the very reason that Taiwan which has four million spindles and 72,000 looms has incorporated the most sophisticated machinery including the latest open-end spinning and air-jet looms. To this, one can add 6500 circular knitting machines and 600 warp knitting machines. Hongkong also proved a disappointment as they were able to get looms from China at very low rates with which India could not hope to compete. Even in Thailand, where the textile industry is controlled mostly by people of Indian origin, the delegation feels that intensive and continuous efforts might provide a breakthrough into the Thai market.

Only in the Philippines did the delegation strike gold. The Filipino textile industry consists of a hundred mills of which only 24 are integrated. The total number of spindles is 1.23 million and looms 25,777. 80 per cent of the spindles need replacement or modernisation. The government has initiated a programme for scrapping 501,000 spindles which are pre-1965. Nearly 2,74,000 spindles installed between 1968 and 1974 have to be rehabilitated and an expansion planned to reach 480,000 spindles up to 1985. 916 looms are also to be immediately replaced, 12,000 to be rehabilitated and 40,000 new looms to be installed up to 1985. The textile industry in the Philippines has a knitting capacity for 23.3 million *i.e.* 15.4 million sq metres and a finishing capacity of 621.2 million metres. There are 60,000 people employed by the industry. The World Bank has extended to the Filipino textile industry a loan of US $ 150 million which was likely to be repeated for two more years making an aggregate of US $ 450 million. Since the disbursement of the loan is to be done through a committee consisting of representatives from the Board of Investment, Development Bank of the Philippines and the ministry of industries, none of whom are technically qualified, the Shirley Institute has been appointed as consultants. Deliberations with them has revealed that global tenders would be called for, for the supply of equipment/utilities and civil engineering. They also gave the delegation to understand that the apart from being utilised for the purchase of capital equipment a significant portion of the loan would be allocated to meeting the training needs of the country in the textile field which would cover not only the existing personnel but utilised in setting up academic institutions for providing training in textile technology to make available trained textile manpower on a continuous basis for the future. To enable the existing personnel to be trained, short-packed courses and in-built training programmes would also be planned.

The delegation received a good coverage in the local press and got a half-hour live broadcast on Manila TV where Mr Kapadia was interviewed.

Textile machinery industry's production programme (1981-85)

(Rs crores)

	1981-82	1982-83	1983-84	1984-85
Spinning	150.00	165.00	180.00	200.00
Weaving	31.00	36.00	38.00	45.00
Processing	40.00	44.00	54.00	60.00
Textile testing	3.00	3.00	4.00	4.00
Hoisery	6.00	7.00	9.00	11.00
Complete machinery	230.00	255.00	285.00	320.00
Accessories/components	110.00	120.00	130.00	140.00
Grand total	340.00	375.00	415.00	460.00

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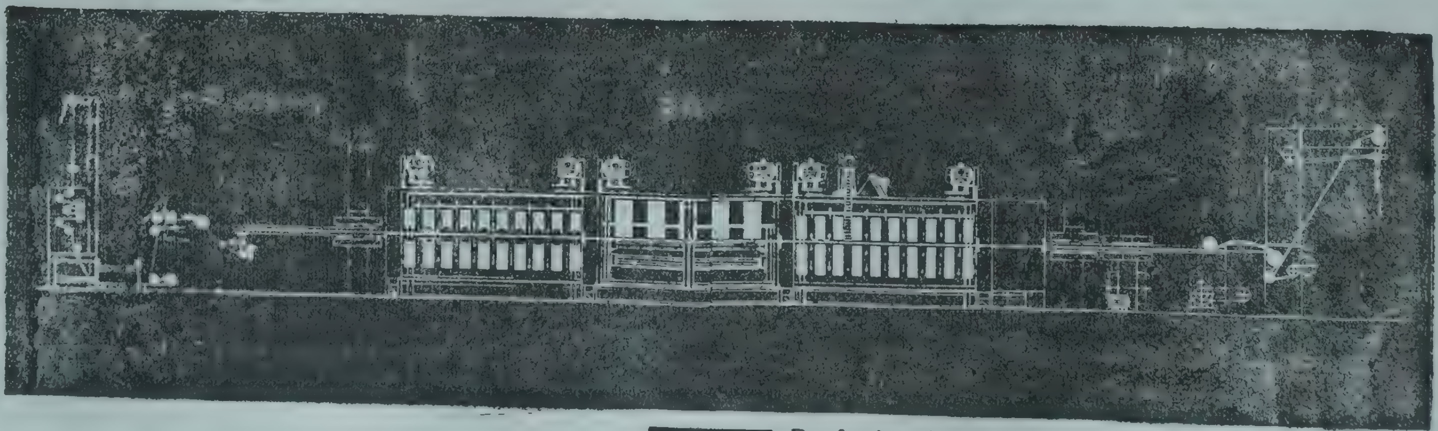

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A revolutionary concept in heat transfer

By NANDISH MEHTA

EVER since the formation of OPEC people the world over have become conscious about conservation of fuel, either by saving in energy with direct reduction in it's use or by devising means to reduce consumption for the same output or by re-using the energy which was released to atmosphere as spent fuel.

Textile processing machinery manufacturers are no exception to this general trend and practically all of them have attempted to contribute to saving in energy — in particular that of stenters either to pre-heat the air or heat the water required for other processes.

A revolutionary new concept of using evaporated moisture from the fabric as heat transfer medium and thereby saving fuel to the extent of 35 per cent with corresponding increase in production by 40 per cent has been practically implemented by Primatex Machinery Pvt Ltd, Bombay in their new stenter model FS-400 which was exhibited at India-Itme.

Why is it necessary to have an exhaust in a stenter? There could only be two reasons : (1) To remove effectively the evaporated moisture from the fabric in the machine. (2) To remove the volatile matter if any, from the evaporated vapour for safety reasons.

Now, let us consider each of these reasons in their proper perspective.

Exhausting for removal of moisture

It is general knowledge that if the evaporated moisture of the fabric is not effectively removed from the circulating hot air in a Stenter, the over-all drying efficiency will reduce as the moisture might condense. And to remove one part of moisture effectively and economically it has to be mixed with nine parts of dry air by weight.

Hence, the exhausting capacity of a stenter has to be equivalent to exhaust ten times the moisture evaporated by it.

Exhausting of such a large quantity results in a low pressure inside the machine and leads to rushing of atmospheric air into the machine. Additional energy has to be consumed to heat this fresh atmospheric air to the required temperature.

The only way of saving this additional energy is to see that no fresh air enters the machine, and the only way to ensure that fresh air does not enter the machine is to see that the pressure inside the stenter is slightly higher than that of the atmosphere. How can this be achieved ? Of course, by stopping the exhaust and accumulating the evaporated vapour, provided in that the vapour so accumulated does not condense.

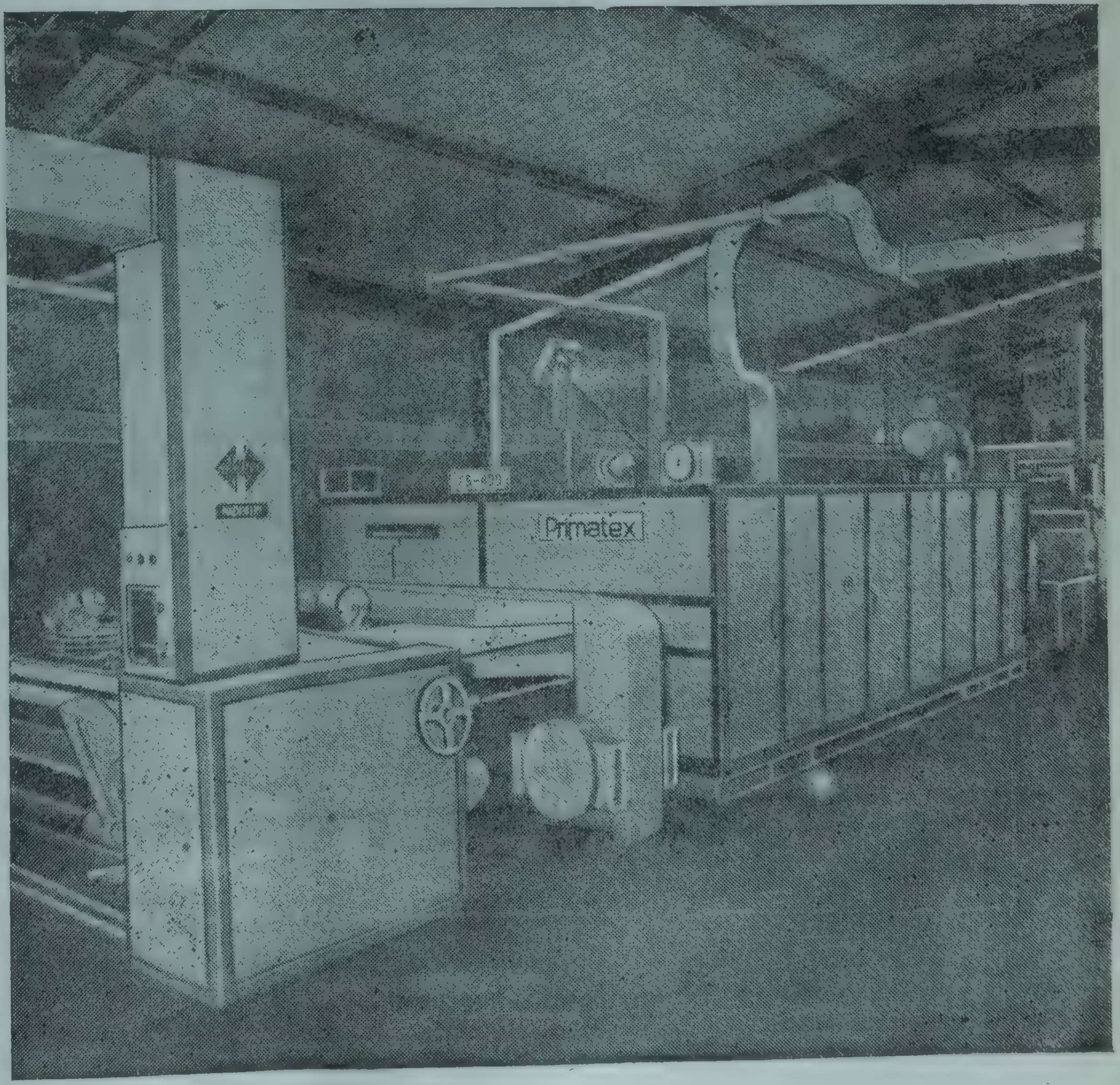
Exhausting of volatile matter

In the event of the evaporated moisture consisting of any volatile matter, it is definitely a safety hazard if the same is not exhausted. However, the volatile matter is hazardous only when it's pressure and the contents exceed the explosive limits. Therefore, if a device was incorporated inside the machine to continuously sense the pressure and automatically start the exhausting of the volatile vapour at a set safe pressure, then it will be quite safe to keep the exhaust normally closed. By not exhausting the vapour most of the time, as explained above, no fresh air would enter the machine, resulting in considerable saving in fuel consumption.

The revolutionary new concept for saving of energy on stenters, invented and developed by Primatex, is based on this basic concept explained above. It will be interesting to understand as to how this new concept has helped the company to achieve a fuel saving of 27.7 per cent without affecting the production and further, as to how this new concept has been integrated with the new stenter model FS-400 which runs at 40 per cent higher speed both for drying and heat-setting, and fuel economy of 35 per cent for every kg of water evaporated.

New concept on existing stenters/dryers

The principle of energy saving by stopping of exhaust on the existing stenters and dryers can be applied, provided that : (i) Condensation of water vapour is totally avoided *i.e.* no part of the machine or the circulating medium is at a temperature below 120°C (a safe tempe-



Primatex Stenter Model FS-400

Mr Mehta is managing director, Primatex Machinery Pvt Ltd, Bombay.

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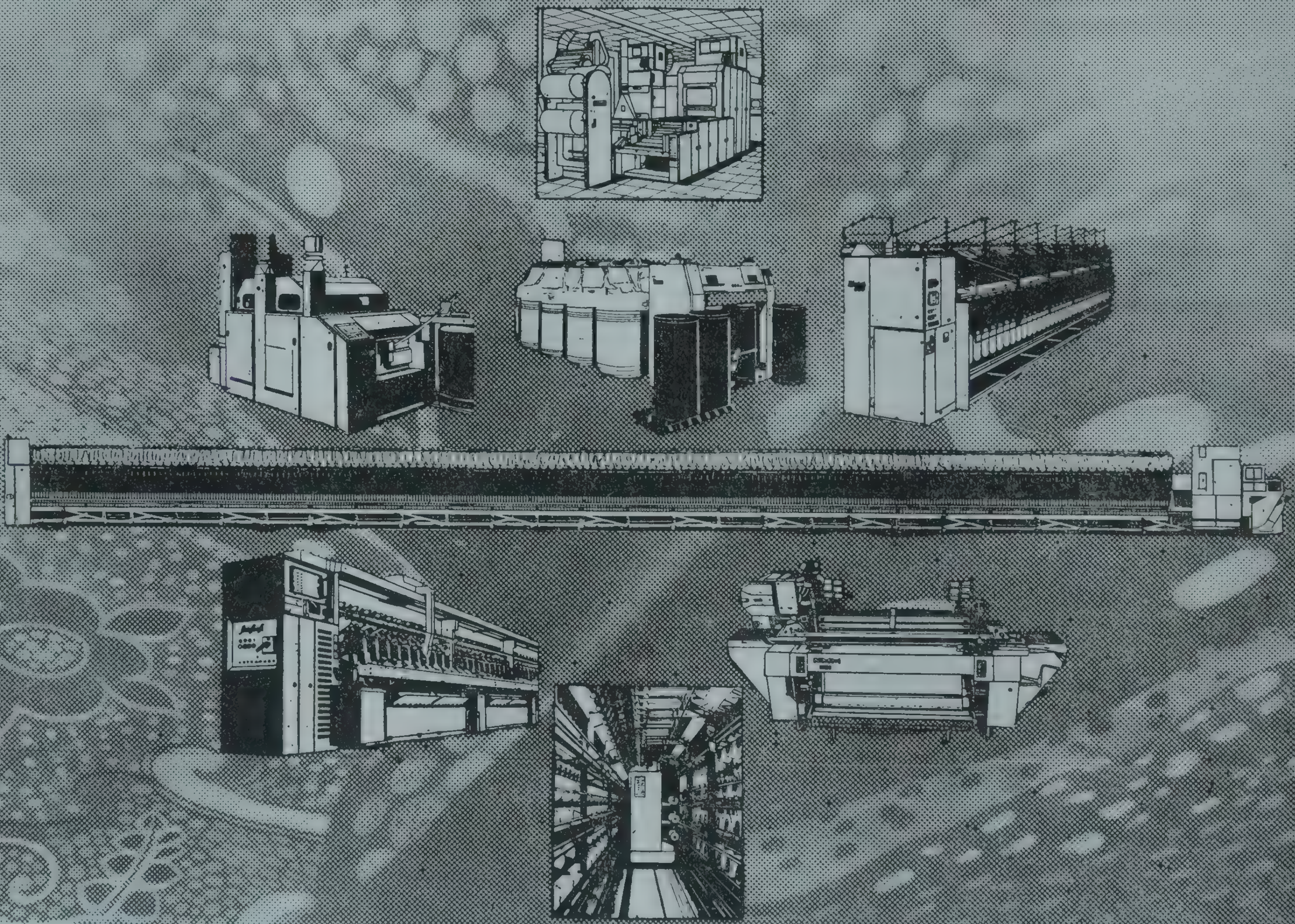
enough to keep pace with growing demands.



The Sixth Plan envisages an increase of 360 million kg. in yarn production and 2,800 million metres in cloth production by 1982-83. And Mafatlal Engineering Industries is fully geared to produce a variety of highly sophisticated textile machinery, to help achieve this target. In this, Mafatlal Engineering Industries is backed by collaborations with leading textile machinery manufacturers of the world. This is how Mafatlal Engineering technology is helping the textile industry grow, year after year. Mafatlal Engineering Industries' commitment to the textile industry is bringing manifold benefits in manifold ways.

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rature for avoiding condensation). (ii) Adequate alterations are made to sense the pressure inside the machine and automatically control the exhaust.

Assuming that the consensation does not take place on existing machines, the energy saving can be worked out as under :

The capacity of a chamber (field) of a stenter/float dryer available today is generally specified as 180 kg of water evaporated/hr for a standard cotton fabric of 110 gms/m unsized and unbleached, containing 100 per cent initial moisture and 8 per cent residual moisture after drying, provided that the temperature of the air heated over the radiator inside the chamber is maintained at 150°C.

Capacity of exhaust air required: = 9 x wt of water evaporated = 9 x 180 kgs/hr = 1,620 kgs/hr.

Therefore, the quantity of fresh air entering the machine will be 1,620 kgs/hr. Heat required to raise the temp of this fresh air from 30°C to 150°C will be 1,620 kg/hr x average specific heat x temp diff = 1,620 x 0.243 Kcal/kg/°C x (150° — 30°) = 47,239.2 Kcal/hr. Therefore, in the event of stopping of exhaust, the energy saved per chamber would be 47,239.2 Kcal/hr.

The total heat required on a stenter for evaporating 180 kg of water/hr is = heat required for evaporating water + heat taken away by fabric + heat required for heating the fresh air due to exhaust + conduction losses through insulations = 180 x (100°—70°) x 1 + 180 x 540 + 180 (150°—100°C) x 0.464 (specific heat of vapour) + 180 kgs (Wt of fabric)/hr x (100—30) x 0.32 (specific heat of fabric) + 47,239.2 (Heat required for heating fresh air) + 5,122 (Minimum loss of heat due to radiation/hr/chamber) = 113,976 + 4,032 + 47,239.2 + 5,122 = 1,70,369.4 Kcal/hr

Saving of heat due to stopping of exhaust will be

$$\frac{47,239.2 \times 100}{1,70,369.4} = 27.7\%$$

(It will be interesting to note that the steam consumption in this stenter will be :

$$\frac{1,70,369.4 \text{ Kcal/hr}}{494 \text{ (Kcal per kg of steam at 7 kg/cm pressure)}} = 344.877 \text{ kgs of steam/hr or } \frac{344.877}{180} = 1.915 \text{ kgs of steam/kg of } H_2O$$

evaporated and claims of steam consumption of less than this figure are totally baseless, provided that the rates of 9 : 1 for air to moisture is maintained in the entire chamber).

Now, let us examine the problem of condensation of water vapour on the existing stenter chambers if the exhaust was to be totally closed. As mentioned before, the minimum temperature anywhere in the machine should never be less than 120°C for avoiding condensation.

Considering the prevailing conditions in the mills, the temperature of circulating medium after heated by steam radiators is in the region of 130°C/135°C and for such conditions the minimum quantity of circulation of vapour can be worked out as under :

Quantity of vapour to be circulated

$$= \frac{\text{Total heat required — Heat in exhaust}}{\text{Sp heat of vapour x Sp wt of vapour x Drop in Temp.}}$$

$$= \frac{1,70,369.4 - 47,239.2}{0.464 \times 0.5797 \times (132.5^\circ - 120^\circ)} = 36,591 \text{ m}^3\text{/hr.}$$

Therefore, on the existing stenters and dryers, where the circulation of medium is maximum up to 32,000 m³/hr, there are chances that the vapour will condense in some part of the machine and the droplets of condensed vapour will fall on this fabric.

Even if, by some means, the circulation per chamber on the existing stenters is increased above 36,591 m³/hr, it is absolutely necessary that the vapour after striking the fabric and having lost the heat whereby its temperature has dropped to 120°C, is returned immediately through proper, guided return passages to the radiators for re-heating, before it starts condensing.

Problem of volatile vapour

As discussed earlier, the exhaust system will have to be provided where the stenter/dryer is used for evaporating volatile matter from the fabric. Assuming that an automatic system of opening the dampers in the exhaust duct coming out from the top of the machine is installed in the existing machines, so that the dampers would open where the pressure in the machine exceeds the safety limits, the problem of condensation would still remain, because the damper in the exhaust duct would be generally closed and the temperature of ducting would be almost room temperature. In the eventuality of the damper being opened when the vapour pressure inside the machine exceeds the set limit, vapour coming in contact with cold ducting would condense and droplets will fall on the fabric.

Therefore, in order to successfully use this new concept of energy saving by stopping the exhaust on existing machines, the present system of exhaust from top of the machine will have to be considerably modified.

Problem of drying efficiency

In the above analysis of energy saving, by changing the medium from air to vapour, we have always assumed that the drying efficiency remains unchanged and hence the evaporation capacity of chamber remains 180 kgs/hr. Is this assumption correct ? Any logical mind would react with a loud "impossible"! Because how can water vapour, even though in the form of superheated steam at 150°C further remove water from the fabric at the same rate as that of dry air at the same temperature !

Theory of fabric drying

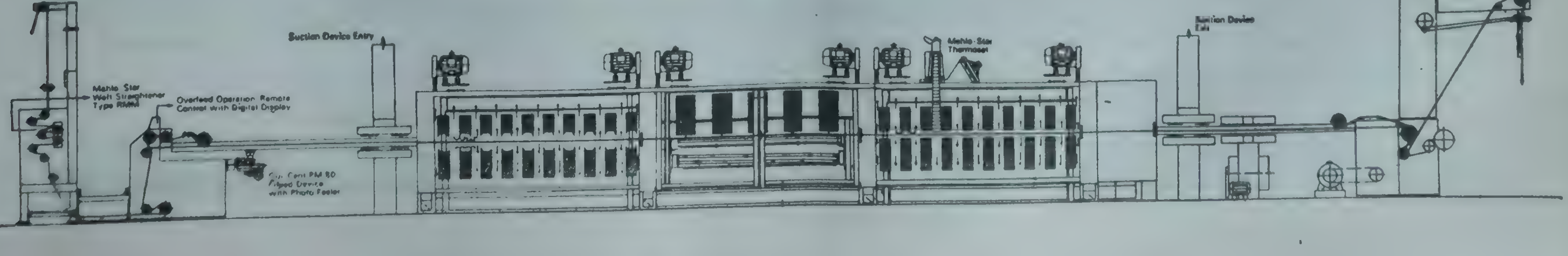
Evaporation of moisture from fabric in a forced convection system like the one adopted in a stenter/dryer, can be divided into two phases : (1) Raising of water temperature in the fabric from 30°C to 100°C. (2) Change of phase from water to its vapour.

The phenomenon of temperature of water in the fabrics rising from 30°C to 100°C is purely a process of heat transfer by conduction and the rate of heat transfer by conduction is directly proportional to the product of specific heat and specific mass of the medium supplying the heat. Therefore, when the heating medium is changed from air to steam, the rate of heat transfer will be increased in the proportion of

$$\frac{0.464 \text{ (Sp heat of steam) x } 0.5797 \text{ (Sp wt of steam)}}{0.243 \text{ (Sp heat of air) x } 0.833 \text{ (Sp wt. of air)}} = 1.328$$

Therefore, the rate of heat transfer for raising the temperature of water in a fabric from 30°C to 100°C, with steam as a medium, is 32.8 per cent more than with air as a medium.

In the second phase, *i.e.* change of phase from water at 100°C to its vapour,



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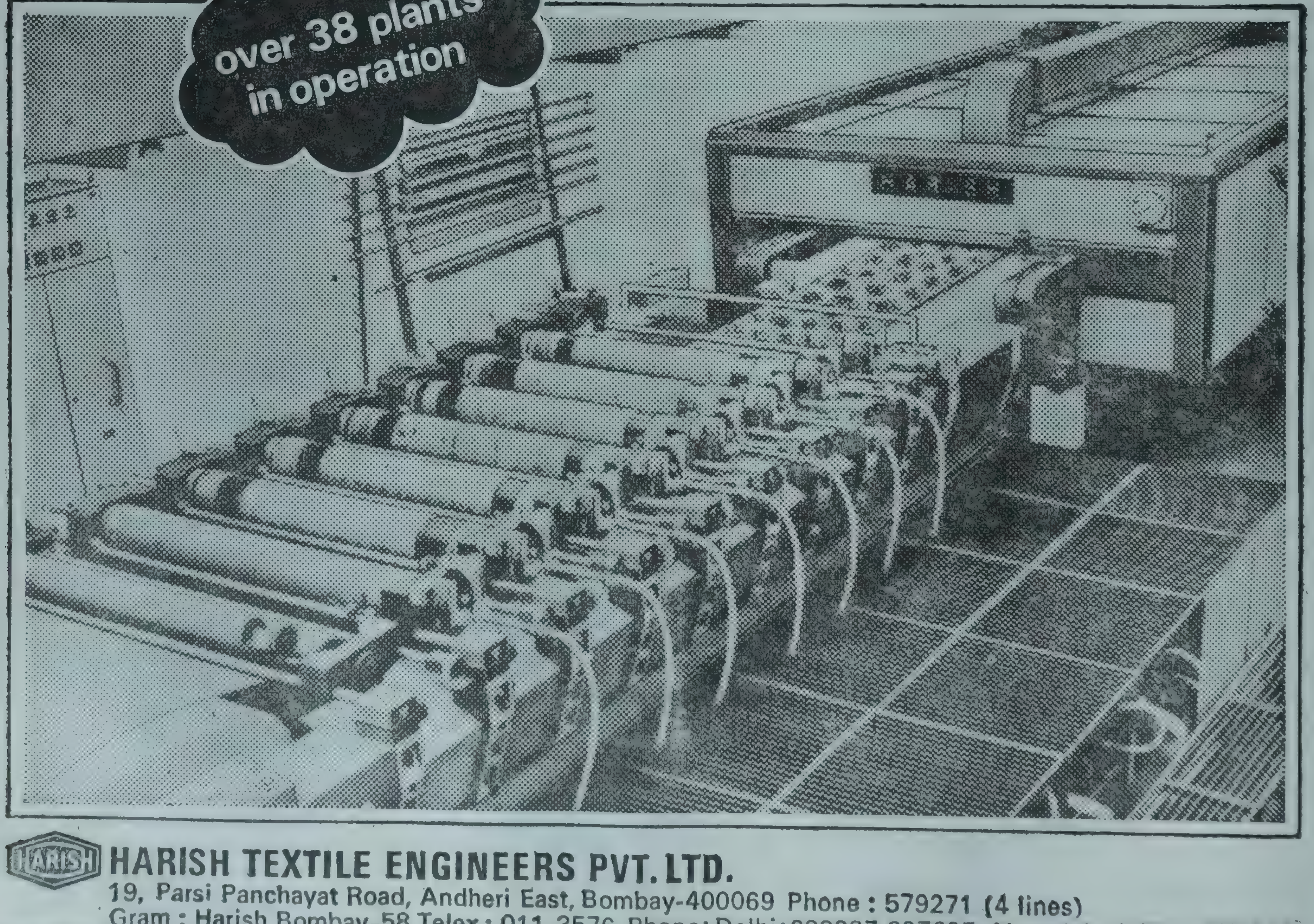

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the phenomenon is that of combined heat and mass transfer. The rate of combined heat and mass transfer is governed by the formula :—

$$\text{Sp. heat} \left| \frac{\text{Thermal conductivity}}{\text{Sp. heat} \times \text{Sp. Wt.} \times \text{mass Diffusivity}} \right| 0.67$$

$$\text{Therefore, } \frac{\text{rate of mass transfer with steam}}{\text{rate of mass transfer with air}}$$

$$= \frac{0.464}{0.243} \times \left| \frac{0.0171 \times 0.243 \times 0.833 \times 0.99}{0\ 0193 \times 0.464 \times 0.5797 \times 1} \right| \frac{0.67}{} \quad 0.67$$

$$= 1.909 \times (0.66) \qquad = 1.909 \times 0.757$$

$$= 1.445$$

Therefore, the change of medium from air to steam will result in 44.5 per cent increase in the rate at which the water at 100°C will change its phase into its vapour.

The combined effect of increase in heat transfer rate of 32.8 per cent for phase 1 and 44.5 per cent of phase 2 will mean an overall increase of heat transfer of 43.2 per cent as computed below :—

$$\frac{(100-30) \times 1.328 + |\,540 + 0.464 \times (150^\circ - 100^\circ)\,| \times 1.445}{(100-30) \times 1 + |\,540 + 0.464\,(150^\circ - 100^\circ)\,| \times 1}$$

$$= \frac{92.96 + 813.8}{70 + 563.2} = \frac{906.76}{633.2} = 1.432$$

The actual trials conducted on the existing Primatex hot air stenter has shown that the efficiency of heat transfer and thereby the evaporation capacity of the chamber has gone up by 40 per cent when the circulating medium was changed from air to steam.

Model FS 400

From the foregoing, we can conclude that, the new concept of using evaporated water from the fabric as a circulating medium in stenter/dryer can be implemented effectively provided :

(1) The rate of circulation in the machine is maintained above 36,591 m^3 /hr. (2) Adequate return passages for every strike of vapour jet over the fabric are provided to avoid condensation of vapour. (3) The heat transfer capacity of the radiator is maintained at a minimum of 200,000 Kcal/hr. and (4) The exhaust position is changed below the fabric line with adequate safety precautions.

Considering these four parameters, Primatex has designed the new stenter model FS 400 with the following features :

1) Increased circulation from 32,000 m^3/hr to 40,000 m^3 /hr by providing two additional circulating fans per chamber within the same available space and without reducing the nitch size.

2) Jet nozzles radically modified for providing adequate and guided return passage for the circulating vapours without reducing the jet velocity.

3) Existing radiator design being of 200,000 Kcal/hr capacity has been retained without any modifications.

4) Exhaust suction points have been shifted at the bottom, below the fabric line and a new safety device has been developed for sensing the chamber pressure and to automatically control the exhaust operation for a pre-set pressure.

With these new features, Model FS 400 has (1) Increased evaporation capacity of 260 kg of water/hr/chamber. (2) The consumption of fuel is 35 per cent less for the same production *i.e.* 1.43 kg of steam/kg of water evaporated or 700 Kcal/kg of water evaporated.

In addition to the feature explained above, Model FS 400 also incorporate certain additional features as explained below :

(1) *Overfeed computer* : The new overfeed device for Model FS 400 stenter provided with a slat chain, whereby the advantage of the toothed belt of earlier design is retained and the overfeed drive is without a slip. The overfeed control is motorised and a digital device indicates the actual overfeed of the fabric by sensing the speed of fabric at entry and exit.

While the digital indication is provided at the entry control board, the push buttons for adjusting the overfeed are both at entry and exit so that excess overfeed can be avoided and/or machine speed can be adjusted. With this novel method, the optimum parameters of the heat setting process can be ascertained directly on the machine without resorting to elaborate laboratory tests.

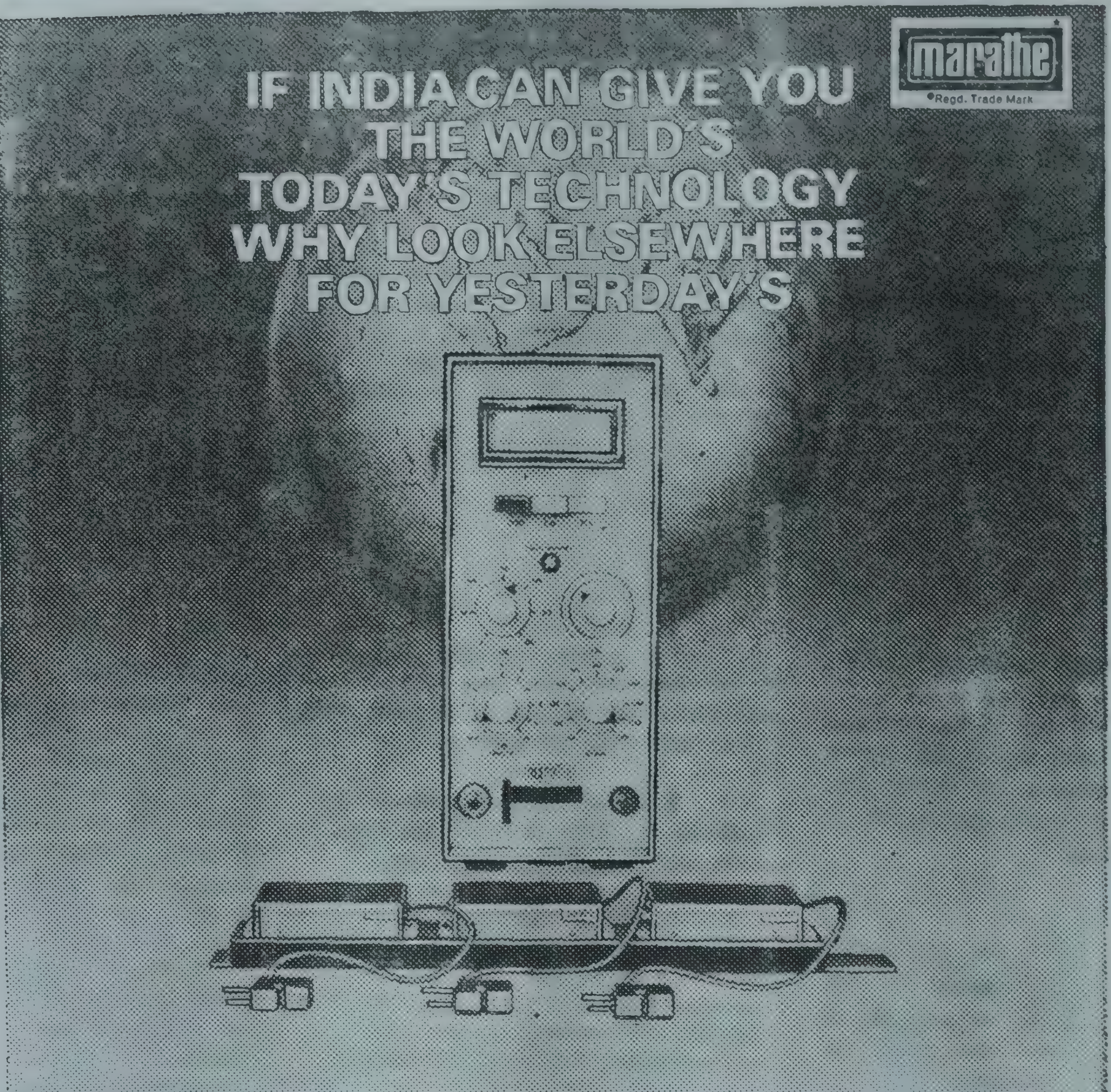
(2) *Quicent PM* 80 : In order to utilise the higher heat setting production speeds of the order of 80 to 120 metres/min on pins, the Model FS 400 is now equipped with photocell feelers in conjunction with DC variable speed feeder motor alongwith rack and pinion mechanism. The proportionate characteristic of this device enables accurate pinning within the selvedges. The entire electrical circuit is made of solid state technology avoiding frequent maintenance required to the electrical contacts in the present feeders, or attending to the carbon brushes and commutators of the DC generator in feeders of similar types.

(3) *Clips* : The twin ball bearing type Primatex clip does not need any introduction. However, it is worth nothing that, only such clips can stretch the fabric weftwise to the required width independent of warpwise shrinkage and/or elongation without leaving any cuts on the selvedges and adding to frictional losses.

When not in operation, the pin bar carrier folds inside in the direction opposite to the weftwise tension in the fabric. Hence, the chances of pin bar carrier collapsing does not arise when the fabric is stretched inadvertently while running on pins.

Since the pin bar carrier folds inside *i.e.* by 90° while not in use there is no chance of any accidental damage to the delicate pins. However, pin bars being routinely consumable the Model FS 400 incorporates clips with modified design to facilitate the change of pin bars practically in no time.

New forced atomised spray lubrication system is provided for improved lubrication. This new stenter has already been installed at New Vinod Silk Mills, Kandivli and results of actual trials have shown fuel saving to the extent of 46 per cent. In terms of money, the saving on account of fuel and power alone works out to Rs 12,00,000



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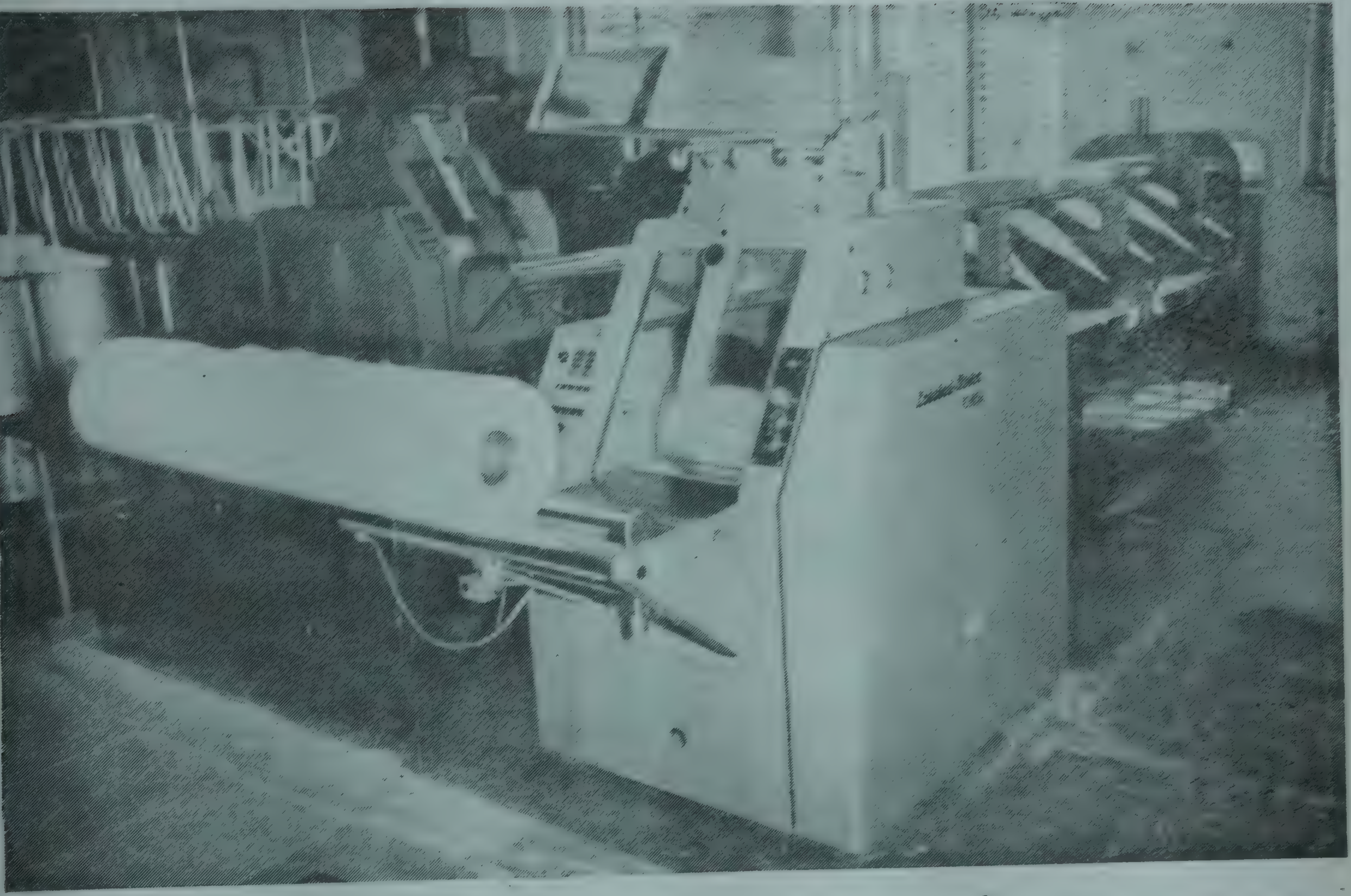


Ribbon and sliver lap machines

A new strategy for export

By AN INDUSTRIAL CORRESPONDENT

PRODUCTION of the Indian textile machinery industry has increased significantly during the last three years, mainly as a result of a surge in demand from the domestic textile mill industry. Total production during the three year period was as under :

Years	Complete machinery (Rs. crores)	Components/ accessories (Rs. crores)	Total (Rs. crores)
1978-79	134.31	67.39	201.70
1979-80	170.00	71.58	241.58
1980-81	221.39	81.30	302.69

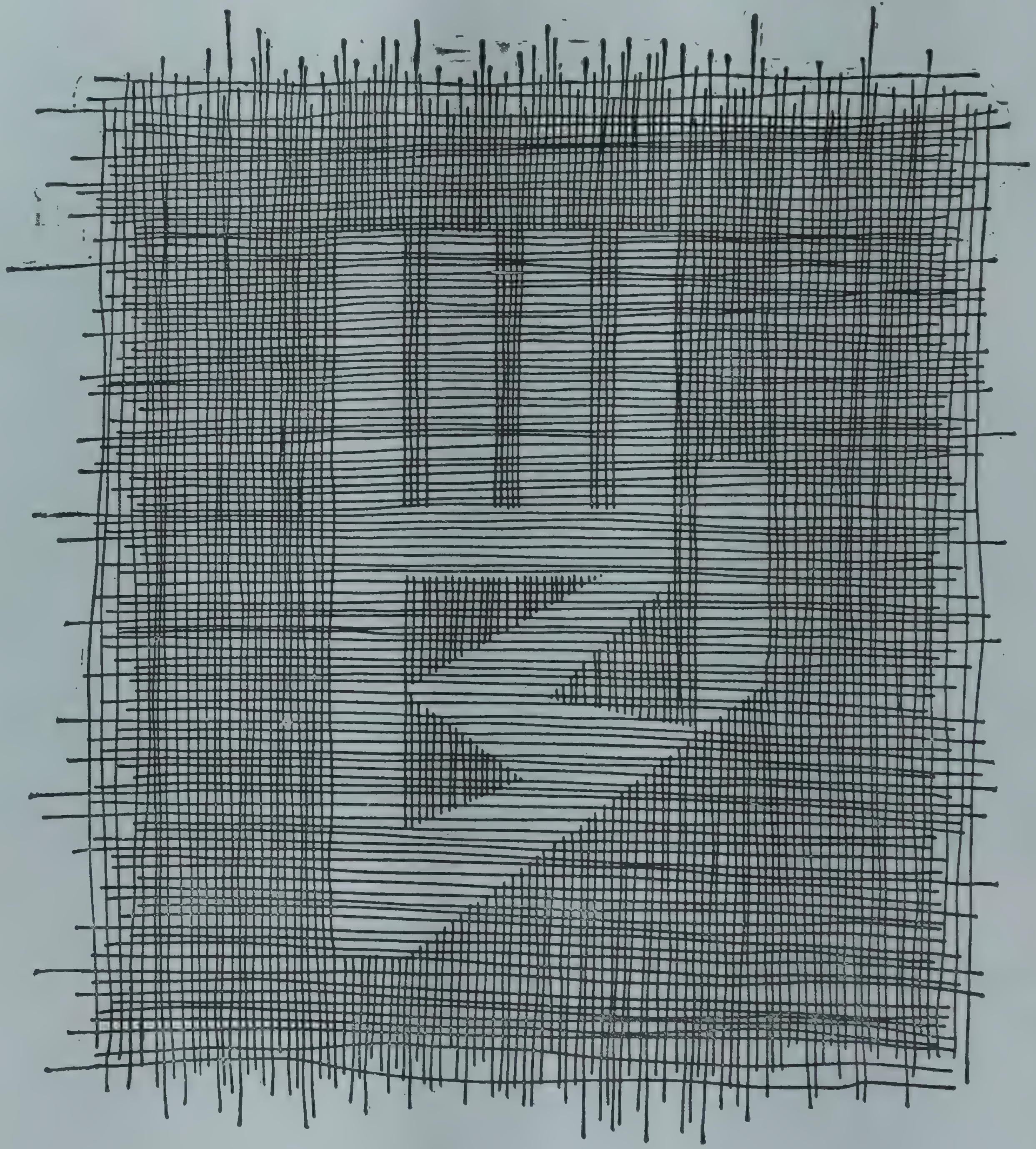
The industry is poised for a further leap forward in the next four years. Over Rs 100 crores are being spent on acquisition of new technology, modernisation of equipment, manufacture of new items, expansion of capacity, etc. An approximate break-up of the new investments will be about Rs 70 crores in spinning & spinning preparatory, about Rs 20 to 25 crores in weaving & weaving preparatory and about Rs 25 crores in processing, finishing and other types of machinery. The user industry will therefore get not only more machines but also the most modern machines with an accent on improved performance and productivity and lower running costs.

With the planned investments in the machinery industry, the total production of textile machinery components and accessories will shoot up to about Rs 460 crores by 1984-85 from the current levels of Rs 302.69.

The TMI has not only been catering fully to the requirements of the domestic textile mill industry, but has also been contributing regularly to the export market. The export performance of the industry over the last five years was as under :

Year	Rs crores
1975-76	22.79
1976-77	15.30
1977-78	10.06
1978-79	12.04
1979-80	13.50

It will be quite obvious from the above figures that though the industry's capacity to produce has increased, the export performance has declined. From a peak of Rs 22.79 crores in 1975-76, the export earnings of the industry have come down to Rs 13.50 crores in 1979-80. The textile industry, being very sensitive to market conditions suffers violent fluctuations in its fortunes from time to time and the textile machinery industry in turn, suffers from the backlash by way of ups and downs in the demand for machinery, components and accessories. A strong export base for the industry is thus not only expedient but has become



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an economic necessity. It takes time to establish the image of an industry as a regular supplier of quality goods in an export market. In an industry like textile machinery, technologies change very fast and a manufacturer-exporter has to continuously update his technology. Markets have to be studied, their preferences noted and personal contacts with the buyers built up. A regular after-sales-service must be assured to the buyer and an information system developed, to enable manufacturers to make prompt bids for export projects. All these things called for a long-term plan and a definite strategy in identifying markets and products.

Concerned with the downward trend in exports the Textile Machinery Manufacturers' Association (TMMA) appointed a Sub-Committee to study the total scenario and submit its findings. Specifically, the Committee had the following terms of reference: (a) To study the factors leading to decline in the export performance of textile machinery industry. (b) To identify markets and the products to be exported with a view to improving the overall performance of the industry. (c) To evolve a strategy for increasing the exports of textile machinery. (d) To specify the steps necessary to be taken by the manufacturers and at the Association level, to achieve the higher targets of exports set for the industry. (e) To enunciate the assistance required from the Government, Indian embassies and EEPC offices abroad.

Apart from identifying certain external factors responsible for the downward trend, the Committee did some soul-searching and came up with some interesting answers. According to the Committee's analysis, the following are some of the principal constraints faced by the Indian textile machinery manufacturers in exporting their products:

1. *Shortages*: Inadequate availability of inputs such as raw-materials, components, power, shipping space etc. In the past, execution of some of the project orders have been delayed because of these shortages, with the result the foreign buyers lost confidence in our ability to supply machinery on schedule and therefore no repeat orders came our way.

2. *After-sales-service*: Here again, against some of the orders secured by Indian machinery manufacturers in the late 60's and early 70's, some of the technical problems that cropped up with the machines were not solved in time and supplies of spares and components were also tardy. This further eroded the confidence of the foreign buyers in our exporters.

3. *Technology*: In the early stages of the industry's development, a wide gap existed between the technology offered by the Indian machinery makers and that available in the developed countries. Many of the foreign buyers therefore preferred to go in for more advanced technology offered by the European nations and Japan. Though the Indian industry in recent years has been producing machines of latest technology the initial period of backwardness lost for the industry a number of export orders.

4. *Local demand*: Unlike the foreign machinery makers who have necessarily to export over 80 per cent of their production for sheer survival, the Indian textile machinery industry has no such compulsion to export because almost 90 per cent of its production is grabbed by the gigantic domestic textile industry. During the last three years, with the availability of the 'soft loan' and the improved market conditions, the Indian textile industry launched upon a massive programme of modernisation and acquisition of new machinery. This has put tremendous pressure on the indigenous textile machinery makers and many of them were booked for a period of 18 to 24 months and some even longer. Virtually no special effort was therefore made by manufacturers to tap new export markets.

The Committee has recommended adoption of a new strategy to effect a breakthrough in the export market and increase the industry's export earnings from Rs 18 crores at present to Rs 40 crores by 1985. The following are the principal elements of this strategy.

1. Manufacturers who accept export as an essential obligation should set apart a certain percentage of their production for exports.

2. Where feasible, 100 per cent export oriented units should be set up.

3. Warehouse-cum-spare-parts depots must be established in different parts of world where the industry has the maximum export potential. This will ensure quick and efficient after-sales-service. Besides, Indian manufacturers should either train the staff of agents or keep their own service engineers in the agents' territories.

4. Indian entrepreneurs should be encouraged to take up joint textile mill projects in third countries so that Indian capital equipment could be exported against Indian equity participation.

5. Where Indian manufacturers are not able to get full textile mill projects they could tie-up with companies in third countries for either a part of the project or supply of individual items of machinery or services.

6. In addition to export of machinery, accessories and components, a greater thrust should also be given to the export of utility equipment such as air-conditioners and humidification plants, fire-fighting equipment, boilers, water treatment plants and electrical equipment. In the case of turnkey projects, the machinery makers could also increase foreign exchange earnings by way of undertaking building construction for the textile mills, housing colonies and other infrastructural facilities. They can also export technical and skilled man-power and management services for such projects.

Taking into consideration various factors both national and international, the Committee has recommended following export targets for the industry:

Year	Rs. crores
1981-82	25
1982-83	30
1983-84	35
1984-85	40

The Committee while admitting that a deeper study will be necessary to assess the potential of each market, has nevertheless pinpointed most promising areas for undertaking a vigorous export drive:

	Percentage of target Fixed (Approximately) (%)
Neighbouring countries like Pakistan, Bangladesh. Sri Lanka & Burma —	20
East African countries like Kenya, Tanzania, Zambia, Uganda —	10
North African countries like Nigeria, Ghana, Zimbabwe, Cameroon, Gabon. —	10
West Asian countries like Iran, Iraq, Syria & Turkey —	10
South East Asian countries like Indonesia, South Korea, Thailand, Vietnam, Malaysia, Philippines. Taiwan, Singapore, Laos. —	20
East European countries like Poland, Bulgaria, G. D. R. & Hungary, Rumania, Czechoslovakia, Russia & Yugoslava. —	10
Developed countries —	5
Other countries including Latin American countries and China —	5
	100

In conclusion, while fixing export targets, which are quite modest and well within the reach of the industry, is a mechanical exercise, the biggest gain that has resulted from the work of the Committee is the realisation on the part of the industry that export has to be cultivated consciously as a culture and not merely be a hit and run affair. If some of the infrastructural constraints are removed and also additional export assistance is given by the Government, there is no reason why the export performance of the industry should not exceed the targets the industry has set for itself.

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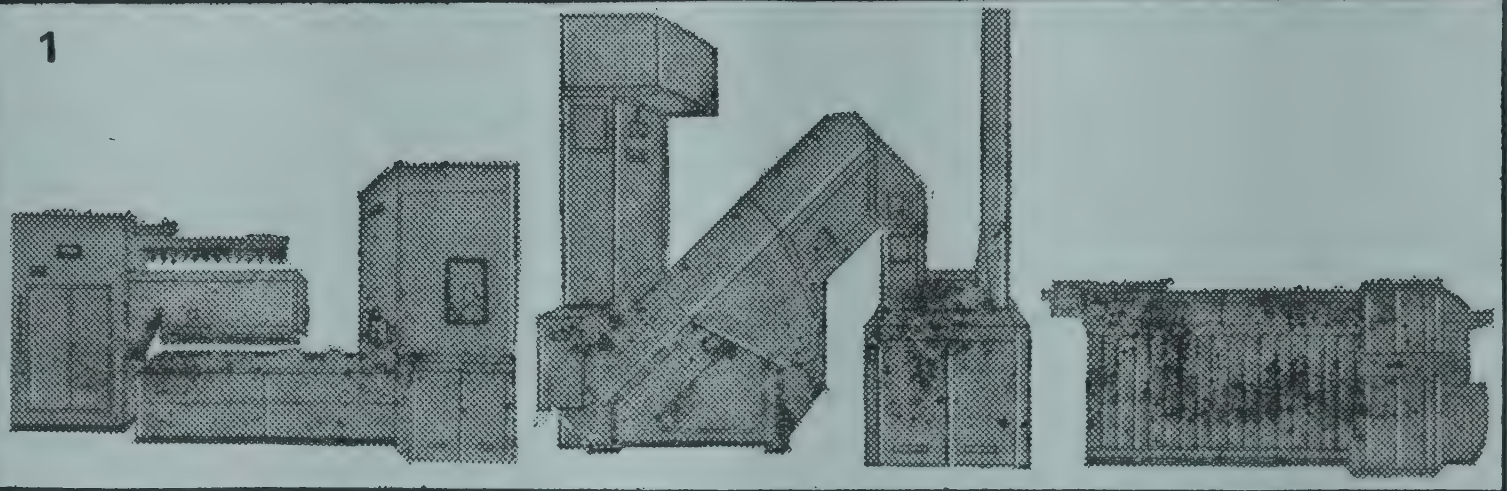

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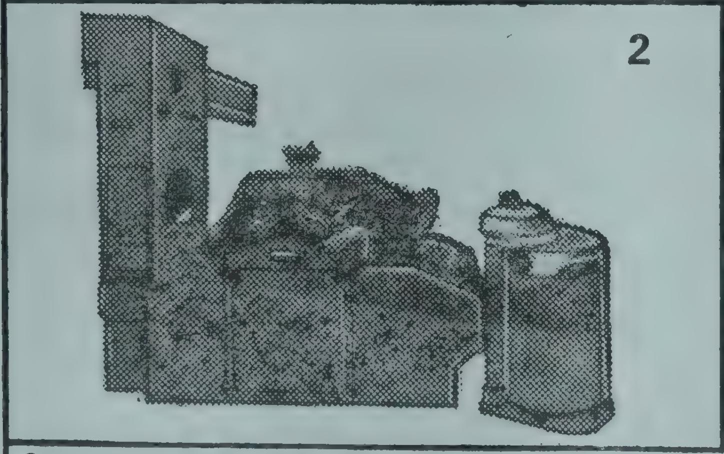

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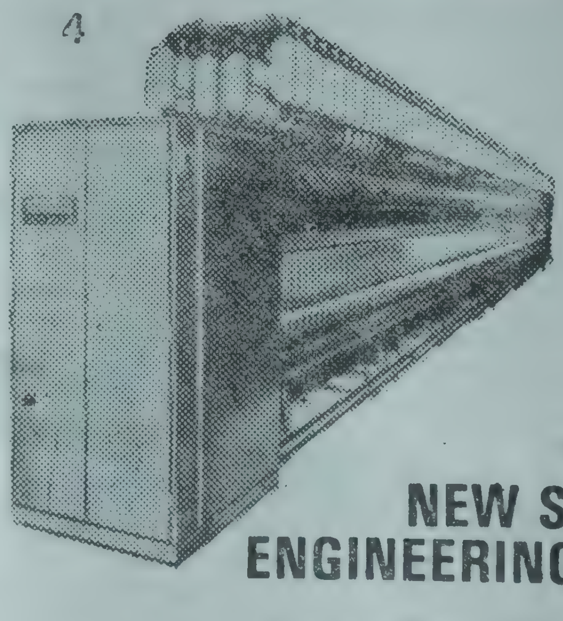

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Improved yarn quality and saving in mill operation

By S. J. CHANDIRAMANI

FOR weaving of cloth, yarn must be suitably prepared. Unless preliminary operations are carried out efficiently, weave-room is bound to suffer. Yarn is prepared for the manufacture of cloth on what is known as winding and warping machines. Barber-Colman is one of the most efficient winding and warping machines that prepare yarn to run efficiently and to give best possible production results in the weaving room. Development of Barber-Colman automatic winding and warping system has practically eliminated human elements. Operators of spooler are required only to place bobbins in position to be handled by the automatic mechanisms; and to remove full package. Machines are, therefore, not subject to such human characteristics as fatigue, carelessness, indifference or errors that are frequently found on manually operated machines. Operations performed by the workers on the machines are extremely simple. Work is of high quality, with only reasonable supervision required, and such production is continuous at great reduction in cost.

In most cases, it is desirable to break out gouts, bad piece-ups, thick places and wild yarn which may later cause loom stoppage or defects in the cloth. Barber-Colman automatic spoolers are equipped with automatic cleaning devices known as snick plates. These snick plates remove foreign matter and imperfections without injury to the yarn. Their efficiency is highly regarded where production of quality yarn is required. Constant improvement in the design of this unit has assured maximum efficiency in removing undesirable matter.

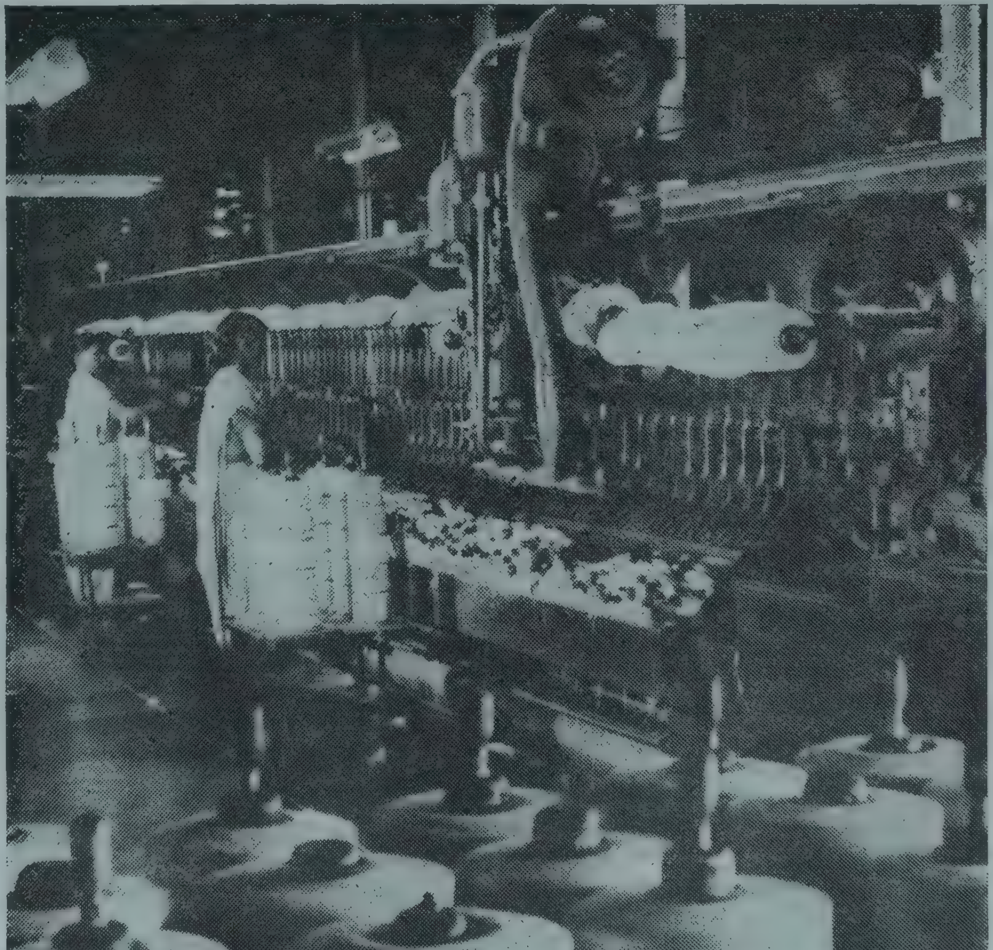
Loom beams from Barber-Colman warpers weave with less breakages than those from ordinary beams. Low, uniform tension on the yarn provides equal stretch to all strands and preserves elasticity for better strength to stand the loan at the loom. Less breakages of the warper results in better work of the slasher and straighter warps at the loom. High quality yarn, mechanically-tied weaver knots, elimination of spooler kinks and removel of imperfections combine to reduce loom stops and seconds in the cloth room.

Mr Chandiramani is manager, Textiles Department, Batliboi & Company Ltd.

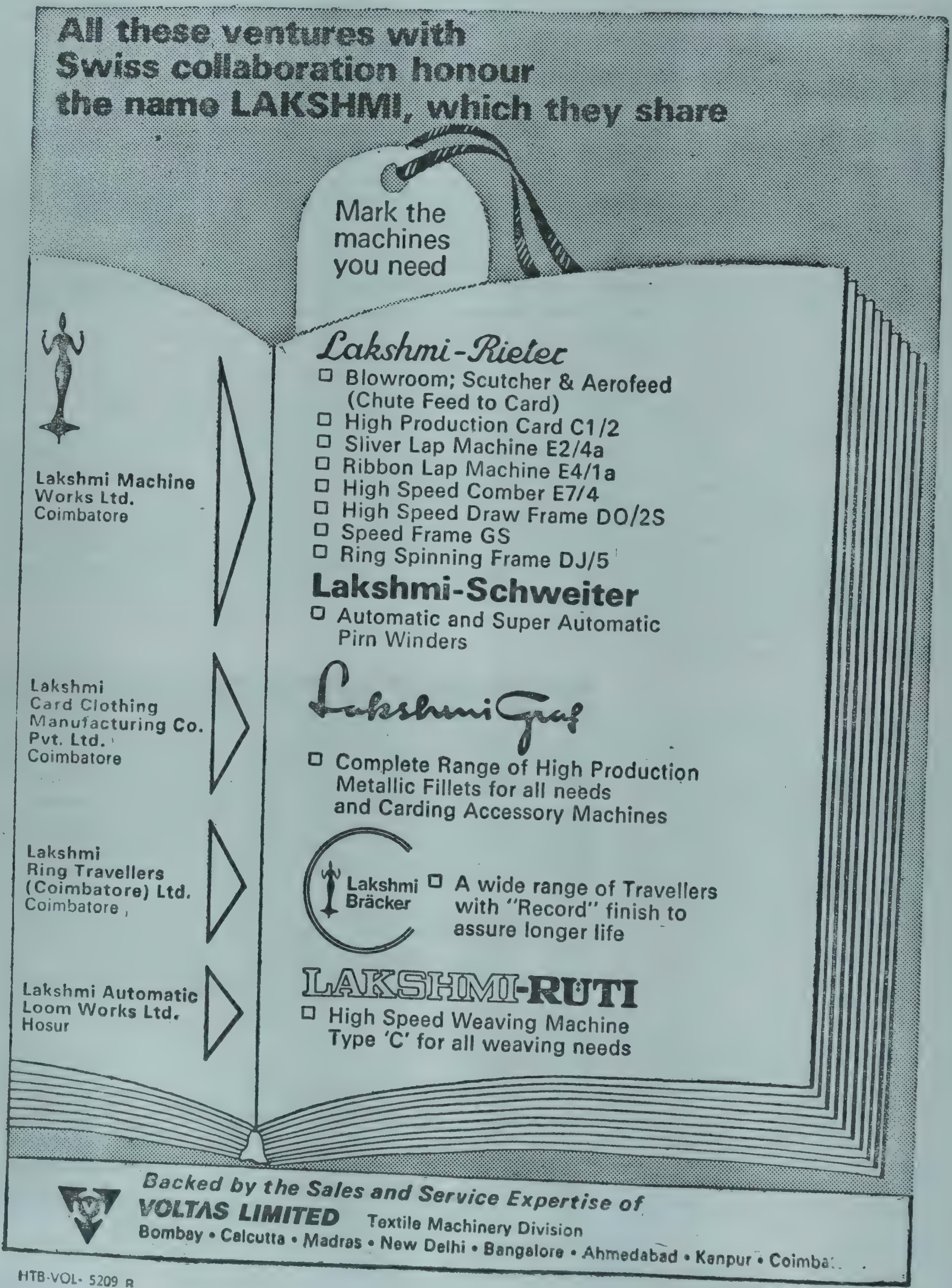
To facilitate handing the yarn from spooler to warper without damage, a cheese carrier is used. The cheeses, handled on tridents, are much less liable to injury than by other methods where spools may be thrown into boxes or roughly handled damaging the yarn.

There is minimum tension on yarn handled by Barber-Colman system of spooling and warping. On the spooler, no tension is applied to the running thread except that which is caused in winding off from the bobbin and from air friction. No tension is applied to the yarn on warper except that created as the yarn comes off the cheeses overend. Air is the only element that adds friction, and this provides uniform tension equally to all running threads resulting in superior beams. As a result of minimum uniform tension the strength and life of yarn are fully preserved for the loom.

The advantage of weaver's knots and their importance in processes following spooling are generally recognised throughout the textile industry. More uniform distribution of mass of the knot around the yarn, less bulk and decreased tendency to slip, allow the weaver's knot to pass more readily through harness eyes and reed dents. The result is fewer stops. This type of knot also passes more freely through the eyes of needles when the yarn is used in knitting machines. Knots with short ends bury themselves more completely in cloth than those having long ends. Long ends on knots frequently cause many loom stops due to tangling with adjacent threads. This is especially true on certain classes of work such as leno weaves. The present weaver's knotter is standard equipment on automatic spoolers. It ties knots with short ends, is entirely mechanical and is not subject to the variations found in hand-operated knotters.



Some women operating a Barber-Colman winder



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INTERVIEW

Industry's prospects bright in 80s and beyond says Suresh Mehta

In a tete-a-tete with Mr Leon Lobo of Commerce, Mr Suresh Mehta, chairman, Star Group of Companies and former chairman respectively of the Textile Machinery Manufacturers' Association (India) and the Engineering Export Promotion Council, painted an optimistic picture of the textile machinery industry on a wide canvas at the same time making no bones about what would have to be done by both industry and government if the targets set for production and exports were to be met.

(1) *Unqualified success though it was, what lessons has India-ITME 80 imparted to Indian textile machinery manufacturers? What directions will the industry take as a result-in R & D, production and export?*

More than 1,000 different textile machinery exhibits were displayed by 106 Indian and 18 foreign participants in an area of about 6,200 sq mtrs floor space in three different Halls in India Itme 80. The exhibition brought out a number of new developments, designs, technologies and machines displayed for the first time under a single roof. While the exhibition brought home the need to reduce the technological gap between Indian manufacturers and their foreign counterparts, it showed that technologically even the small and hitherto less known manufacturers had made substantial advances so as to hold their heads high in an international exhibition and received large Indian and foreign enquiries and orders. The user industries especially the cotton textile industry, was also able to see the significant advances made by Indian industry and gained greater appreciation of the production capability of Indian industry to meet its requirements. The exhibition has given a further stimulus to greater R & D efforts by Indian manufacturers which, I am sure, has been given a great fillip and simultaneously larger number of technological tie-ups with foreign manufacturers having advanced technology on a selective basis.

(2) *Since you were the Chairman, Steering Committee, looking back, what were the short-comings of the fair (1) organisational (2) otherwise and how would you endeavour to overcome these in future?*

The approach of the Steering Committee of India-Itme 80 was professional and the exhibition was largely functional so that it could operate as an instrument to generate larger sales of textile machinery and components at home and abroad.With the rigid time limit of about two months all that was humanly possible was done to make the exhibition a great success. The major lesson to be drawn was the imperative need for a large and permanent exhibitions complex at Bombay which is the industrial, commercial and financial capital of the country so that more time is devoted to enlist significantly larger participation both by Indian and foreign manufacturers. It also showed what a colossal loss of scarce resources is involved in putting up magnificient pavilions and stalls and other infrastructural facilities at great cost and pulling them down within a short spell of time at the end of the exhibition.

(3) *You would recall that you had told newsmen at the time that efforts were being made to retain Bandra Reclamation Ground as a permanent exhibition site, considering the enormous effort and expense that went into setting up India-ITME 80. Have these fructified? If not why? What alternative plans have you made for the next India-ITME? Have you been offered an alternative site for a permanent exhibition centre on the lines of Pragati Maidan, New Delhi. One would imagine that Bandra, from all angles, offered the best scope.*

Notwithstanding the strenuous efforts made by the organisers of India-Itme '80 and spokesmen of the Central Government, it was not possible to retain the structures and the facilities created for India-Itme '80 at Bandra Reclamation Grounds, Bombay, on a semi-permanent basis until a permanent exhibitions complex is created at Bombay. The outstanding success of India-Itme '80 has stimulated major industries and their associations in Bombay to join hands with the India-Itme Society for undertaking the setting up of a large and well-equipped permanent exhibitions complex at a suitable site in Bombay to serve the requirements of exhibitions at Bombay for all industries. We are very hopeful of getting a suitable site, and spokesmen of other major industries such as engineering, machine tools, clothing, agree with the India-Itme Society that the permanent exhibitions complex should be so planned and executed that it would not only meet the requirements of today but it should be adequate for the requirements of 1999.

(4) *What are your projections for the next India-ITME? Will you also organise a technical congress as you did last time?*

The Steering Committee of India-Itme Society has decided to hold the next India-Itme at Bombay in the second half of November 1984. This commitment stands unchanged and I am hopeful that by then the first stage of the permanent exhibitions complex, constructed.

(5) *Coming to the textile machinery scene, both domestic and international what are the current trends? How does the textile situation in both areas influence the demand for machinery. What effect has inflation and raw material inadequacy had on production and sales?*

The fortunes of the textile machinery industry are closely linked with those of the textile industries in general and the cotton textile industry in particular. The cotton textile industry enjoyed relatively favourable climate in terms of demand at home and abroad during the past three years, and this in turn, helped to maintain an expanding demand for the products of the Indian textile machinery industry. So far as the international picture is concerned, the relative overall recession in demand continues further, but there has been a strong revival of demand in select countries for textile machinery since the beginning of this year. The Indian textile mill industry is currently facing difficulties in terms of consumer resistance to increase in prices and escalation of costs, especially, prices of raw cotton which constitutes the bulk of the unit cost of production. Besides, fuel costs and electricity cuts are adversely affecting the cost-economics particularly of yarn production. It is, however, hoped that appropriate steps would be taken by the Government to sort out the difficulties of the textile industry which is the largest and the oldest industry of the country. In common with other industries, the growth and the expansion of production of the textile machinery industry suffer from substantive escalation in the costs of raw materials, besides foreign exchange fluctuations of the value of the Indian rupee in terms of the US dollar and the appreciation of the US dollar in terms of the major Western European currencies.

(6) *How much has mill modernisation under the IDBI's soft loan scheme helped machinery manufacturers in India? What are the drawbacks of the scheme, if any?*

The Soft Loan Scheme of the IDBI has been the most important single factor in greatly increasing the demand for the indigenous textile machinery, components and parts. There is a huge backlog of modernisation of the textile mill industry yet to be carried out and it is essential that the Scheme is continued and the annual level of disbursement of loans is maintained at Rs 250 crores so that the modernisation is completed quickly and a stable demand is maintained for the products of the textile machinery industry which would be encouraged to undertake the neglected investment in expansion of capacity and modernisation of existing equipment. The principal limitations are the uncertainty as to how long the scheme would continue and Government should unequivocally announce that the Scheme would continue atleast during the entire Sixth Plan period.

(7) *What developments do you forsee for Indian textile machinery during the decade of the eighties? What about the international scene?*

(9) *What about exports of textile machinery? Will they grow during the eighties? What new markets can we expect? What strategies should be adopt?*

(10) *What about export of consultancy services and turn-key projects? We have made a beginning; where will this lead? What are the prospects—Short-term as well as long-term?*

In my view, the textile machinery industry is poised for tremendous expansion of production and a significant increase in exports abroad during the 80s. The total production of textile machinery, components and accessories reached the level of Rs 241 croses in 1979-80. The textile machinery industry has set a target of the expansion of production of machinery and components of Rs 460 crores by 1984-85. Given assured availability of raw materials, spare parts and power supplies, there is no reason why this level should not be achieved by the end of the Sixth Plan. The textile machinery exports had reached Rs 22.79 crores in 1975-76 but due to internal and international factors, the total exports tended to decline in the three years ending 1978-79. Provisional figures show that total exports would reach about Rs 19 crores in 1980-81. The Textile Machinery Manufacturers' Association (India) has set a target of exports of Rs 20 crores for 1981-82, but I consider this target to be very low. The current year's target should be raised atleast to Rs 25 crores and preferably to Rs 30 crores. As chairman of the Textile Machinery Panel of EEPC, we have begun an exercise of intensive consultation and analysis to increase the export targets for the forthcoming years not only with the TMMA & AMMTMS, but also with prominent merchant exporters, project exporters and consultancy organisations. I am confident that the export contribution of our industry including non-textile machinery exports and consultancy and services exports, can be raised to Rs 40 or even Rs 50 crores for the next year and up to Rs 100 crores by 1984-85.

There is reason to believe exports would continue to grow on a diversified basis during the 80s. The principal markets for Indian textile machinery and components are the developing countries of South-East Asia, Africa, Latin America and some of the East European countries. Pakistan, Bangladesh, Ceylon, Egypt, Tanzania, Sudan, Nigeria, Ghana, Iran, Iraq, Turkey, Indonesia, South Korea, Malaysia, Philippines provide considerable scope for exports of Indian machinery, consultancy services and management contract services for a number of reasons. Climatically, these countries have conditions similar to those in India and they also face difficulties of power supply, coal supply, fuel supply and inadequacy of trained and skilled labour force. Indian machinery which has proved the test of time under difficulties of this kind would be more suitable to the stage of economic development and the available local skills than highly advanced, sophisticated, automative machines of advanced countries. Moreover, these countries require training of the personnel in different fields of textile engineering. They also require trained managers to modernise their existing textile units, rehabilitate them with new equipment and commission and operate them for a reasonable period of time until their own personnel are able to take over. Many of the large textile machinery manufacturing units and textile companies, including companies having consultancy, management and development services are in a position to provide these requirements of the development countries. There is also considerable scope for expanding our exports to advanced countries such as West Germany, France, etc.

(8) *Do you favour more rigorous basic R & D by Indian manufacturers or judicious collaborations to induct high level technology or a favourable blend of the two? If the latter, who will define areas of R & D so that there is no overlapping?*

There is a very large scope for establishing in-house research & development centres by Indian textile machinery manufacturers and this must be done. In the end effect, research suitable for our own needs and suited to our conditions, can only be done by us and not by others. Jute is a case in point. You cannot expect other countries which do not produce jute to carry out research in jute processing or jute machinery. In my opinon, both our user and machinery making industries have so far paid scant respect to R & D with a few significant exceptions. This being said, it is pointless in the textile machinery field as an other industrial fields, to waste resources in developing advanced technologies which have already been proved and operated by advanced countries.

In such cases, it is economical and practical to negotiate technical collaboration agreements with suitable foreign manufacturers and then indigenous R & D effort should be directed to adapt the imported technologies and machines to local conditions and to develop prototypes of improved designs. The decision on where to draw the line between imports of technology and corresponding indigenous R & D effort is a matter which must be the responsibility of the manufacturer concerned and to my mind, the only basis can be the cost economic evaluation of carrying out indigenous R & D in terms of both money spent and time required *vis-a-vis* the cost of importing technology, taking also into account the indirect factor of likely dependence for ever on foreigners in this important area. Outside agencies which do not know the latest advances made by particular R & D centres would not be in a position to take decisions in the matter. Moreover, technology is changing so fast that the upgradation of the technology with a view to narrowing the gap should be decided by knowledgeable people directly in charge of the industry and not by outside agencies.

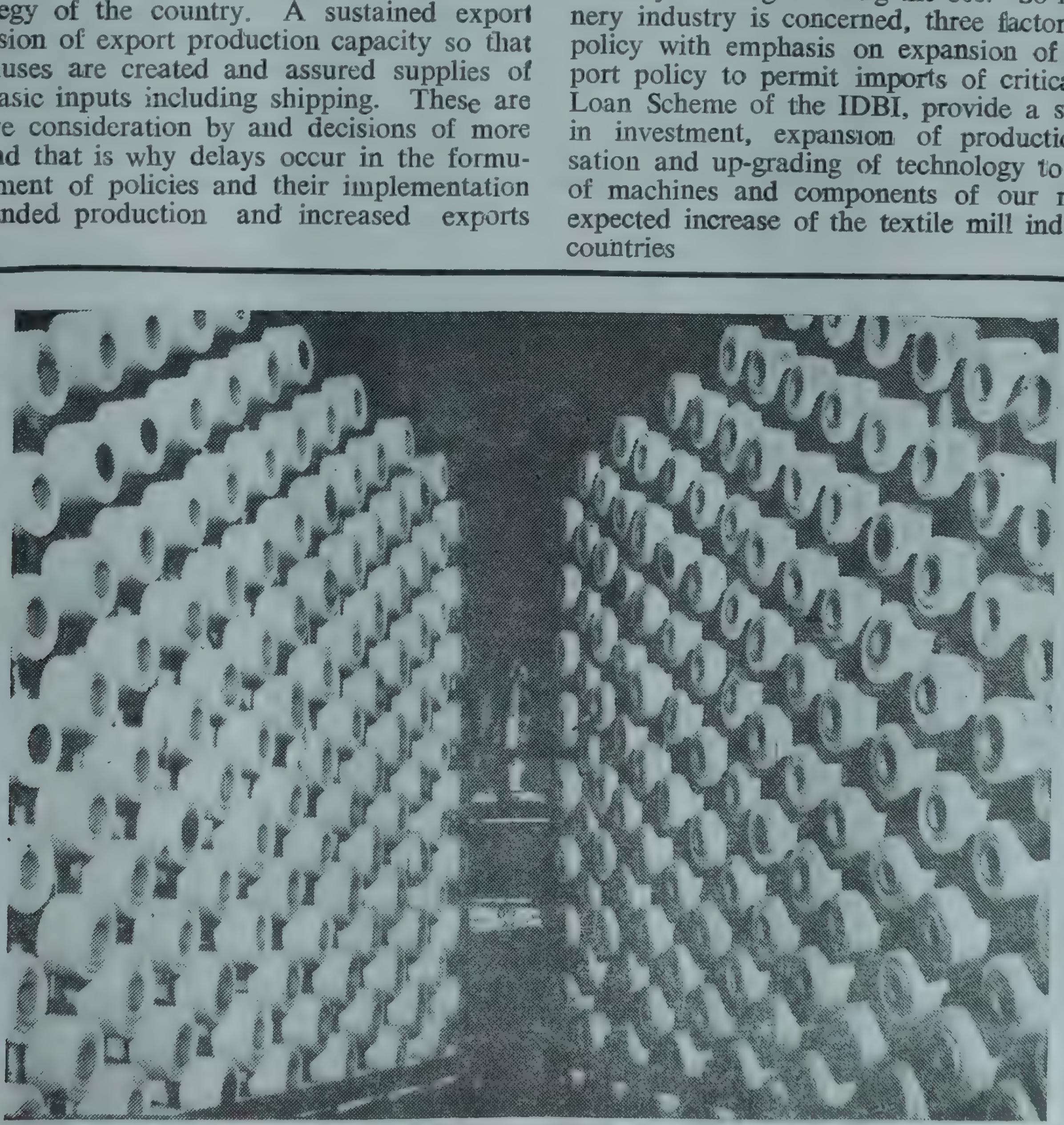
(11) *What do you expect from the government in the shape of policies and incentives to make a success of your export efforts?*

The Government of India in the Union Commerce Ministry are fully seized of the vital importance of stepping up exports and are anxious to examine the difficulties and problems and to provide necessary help to overcome the limitations. The export effort has to be a continuous process, and it cannot be a switch-on and switch-off kind of operation because regular delivery of supplies of acceptable quality is indispensable for building up and maintaining confidence of foreign buyers in Indian manufacturers as reliable suppliers of these products. If there is an interruption of supplies even for a short period, well-nursed markets may be lost for ever. Against this perspective, the export effort or strategy of the country cannot be divorced from or formulated in isolation of the production strategy of the country. A sustained export effort requires expansion of export production capacity so that genuine export surpluses are created and assured supplies of infrastructural and basic inputs including shipping. These are matters which involve consideration by and decisions of more than one Ministry and that is why delays occur in the formulation and announcement of policies and their implementation at the cost of expanded production and increased exports abroad.

(12) *What are your prognostications for the textile machinery industry as a whole in India and world-wide in th context of textile trends both current and anticipated.*

Clothing is a basic and primary need of individuals — men, women and children — all the world over. Given th growth rate of populations, the demand for clothing woul continue to rise from year to year. Man-made fabrics, artificial fabrics certainly have greater appeal to consumers an man-made fabrics would continue to play a significant role i meeting the clothing requirements of world populations. Tha being said, cotton would continue to hold the field as th major material to meet the clothing requirements because o durability and climatic conditions in different parts of th world. From a long-term point of view, the prospects for th textile industry and the textile mill industry in India and developing countries of the world are bright. However, the sharp hikes in crude oil prices by the OPEC countries have dislocated economies of both the advanced and the developing countries and set in motion an era of continued inflationary pressures, cost and price increases and foreign exchange fluctuations.

These factors have produced stagflation in economies o many advanced countries with adverse reactions on the world demand and encouraged protectionist tendencies. As a result, there are fluctuations in the world-wide demand for textiles and textile machinery products. However, 1981 has ushered in hopes of revival of world demand and containing of inflation and if these favourable trends continue, the prospects for both the Indian cotton textile industry and the cotton machinery industry are bright during the 80s. So far as the textile machinery industry is concerned, three factors, Government's textile policy with emphasis on expansion of spinning capacity, import policy to permit imports of critical spares and the Soft Loan Scheme of the IDBI, provide a strong base for increase in investment, expansion of production including modernisation and up-grading of technology to meet the requirements of machines and components of our mill industry and the expected increase of the textile mill industry in the developing countries



A bird's eye view of a Barber Coleman warper

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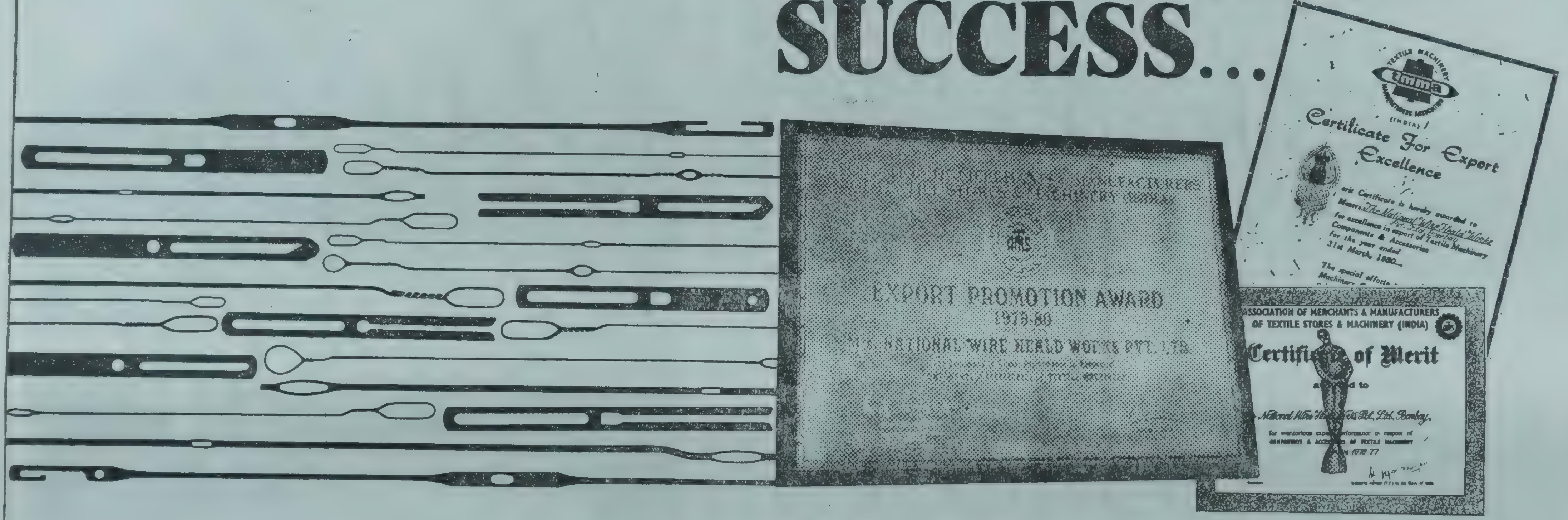
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Conservation of electricity in textile industry

By **A. V. WAGLE**

THE textile industry which is one of the largest and oldest industries in India has been passing through crisis on account of uneconomic working due to outdated production techniques and equipments. Fortunately the government as well as private owned textile groups are aware of the need for modernisation and steps in this direction are underway.

The power and utility play a vital role in running the wheels of textile and other related sectors. In the past the power and utility cost of textile sector was only 3-4 per cent of total cost structure, but due to recent price hike of coal and fuel oil, this cost has gone upto 8-10 per cent. The electrical tariffs are expected to go up further and are likely to double in the next few years.

Indian textile mills are facing stiff competition about their products, qualities and products costs in India as well as in the export market. This additional increase in power and utility cost has compelled them to relook at their machinery and system which consume power. Concern for making efficient use of our valuable energy resources is now of critical importance in conserving them.

Energy conservation—scope in a textile mill

There are two major sources of energy used in a textile mill *i.e.* Electrical energy and Steam energy derived from electricity, oil and/or coal.

Industries account for about 70 per cent of electricity used in India. It is used for motive power *i.e.* motors, for heating and melting, for illumination and for electrolysis. In the textile sector electrical motors consume 90-95 per cent of the total electric power, while the rest is shared by illuminating load, resistive load etc. There is a very great scope for reduction of electricity consumption without affecting the level of production.

Energy factors in the selection of electric motors

Choosing a motor most suitable for a particular application is based on many factors, including the requirements of the driven equipments, service conditions, motor efficiency and motor power factor. Good energy management is the application of the motor and its components that results in the least consumption of energy.

Motor efficiency : Motor efficiency is a measure of the effectiveness with which a motor converts electrical energy into mechanical energy to perform work. It is defined as the ratio of power output to power input or in terms of electrical power, watts output to watts output plus watts losses. Watts losses are electrical energy that is not converted into useful mechanical energy, but is transformed into heat and dissipated through the motor frame. Watts losses represent electrical losses, friction and windage.

Thus, motor efficiency is a function of watts losses. The lower the watts losses of a given motor, the higher the efficiency. Even in higher horsepower motors that typically have higher efficiency percentages than lower horsepower motors, watts losses are significant and cannot be ignored.

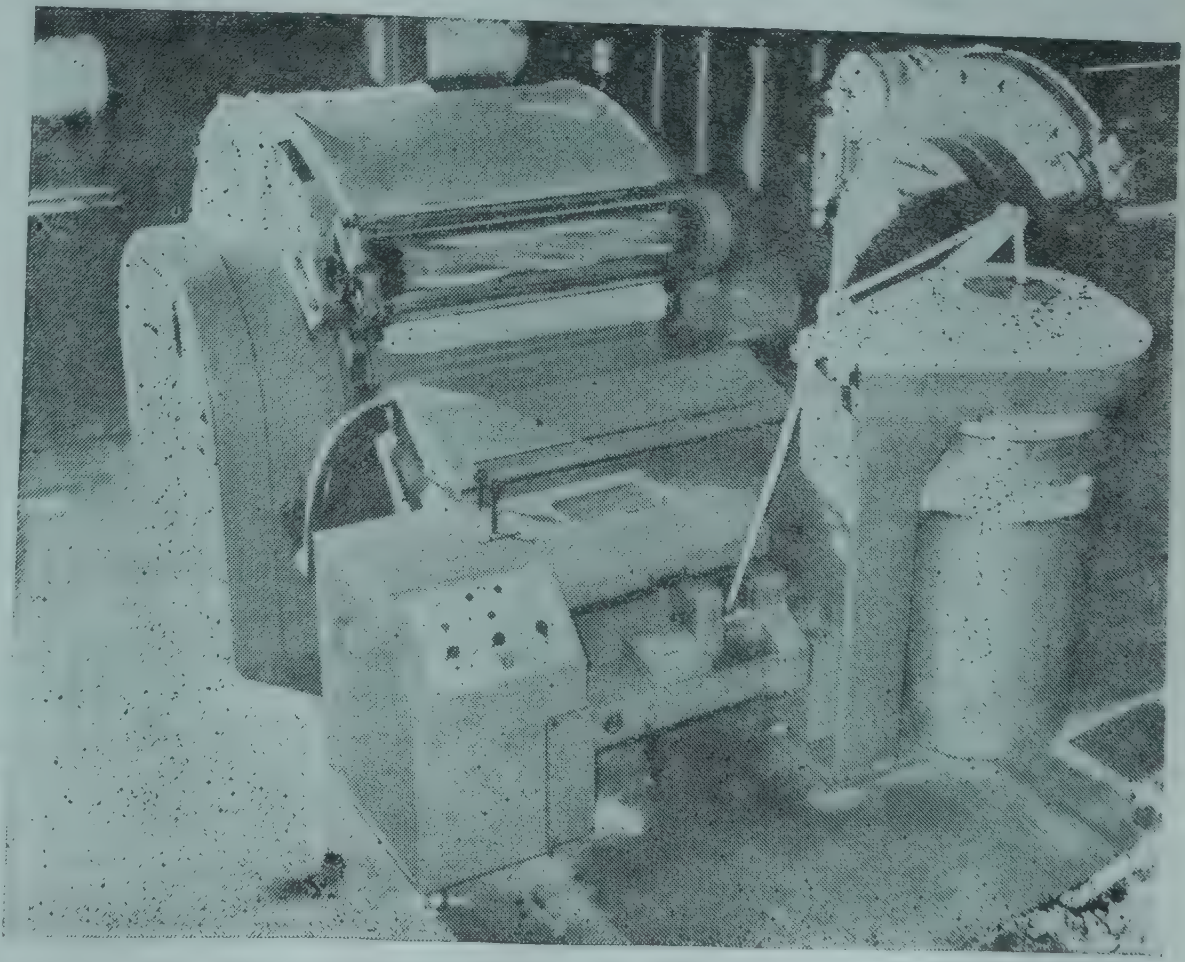
Every AC motor has five components of watts losses that contribute to motor inefficiency : 1) Iron, 2) stator $I^2 r$, 3) rotor $I^2 r$; 4) Friction and windage and 5) stray load loss. The losses are associated with three common elements of motor construction : 1) losses in the circuits which carry current ($I^2 r$ losses); 2) losses in the circuits that carry magnetic flux (Iron) and 3) losses in those parts which help support and ventilate or cool motor parts (friction and windage loss). Stray load losses can occur in any or all these elements.

Improvement in motor efficiency is the result of reducing watt losses. Simply stated :

Reduced losses—Improved efficiency

In terms of existing state of electric motor technology, a reduction in watts losses can be in various ways. (1) Increasing the cross-sectional area of the winding using a greater number of conductors, or large conductor cross section, increasing slot fill and reducing stator $I^2 r$ losses; (2) Adding more core steel, to reduce operating flux density; (3) Utilise low loss, core steel for stator and rotor laminations to improve magnetic properties; (4) Using low-loss motor cooling fans to reduce windage losses.

All of these changes to reduce watts loss also possible with existing motor design and manufacturing technology. They do, however, require additional materials and for the use of higher quality materials resulting in increased motor cost.



High production card

Mr Wagle is chief design engineer, Crompton Greaves Ltd, Bombay.

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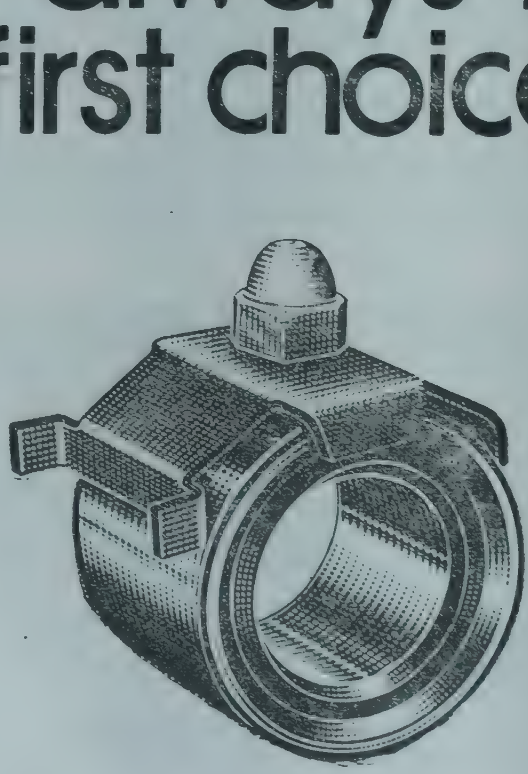

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Power factor and energy costs : An induction motor uses both actual (real power KW) and reactive power (reactive KVAR). Real Power-KW runs the motor and results in useful work. Reactive KVAR performs no useful work, but oscillates back and forth between the motor and the utility's generators. Together they form total KVA : Power factor is the ratio of real power-KW to total KVA and is directly affected by the reactive KVAR.

Industrial power costs are determined on the basis of three energy components : Real power — KW costs; power factor penalties and demand charges.

Real power : Real power-KW is measured by a watt-hour meter and is billed at a given rate (Rs/KWH) by the utility. The quantity of real power consumed depends on the total watts converted by the motor from electrical energy into mechanical and the energy lost in this process due to motor's inefficiency.

Power factor penalties : Power factor is the ratio of real power-KW to total KVA. Total KVA is the vector sum of real Power-KW and reactive KVAR. Although reactive KVAR performs no work, an electric utility must maintain an electrical distribution system to accommodate this additional electrical energy. A utility will often pass this cost on to customers in the form of a penalty when power factor fall below a certain value.

Demand charges : The third energy component is a demand charge based on the peak or maximum power consumed or demanded by an industrial customer during a specific time interval. Because peak power demands may require an electric utility to increase generation capacity a penalty is assessed when demand exceeds a certain level. This power demand is measured by a demand meter and is usually assessed as a multiplier to the Real Power-KW consumed.

Power factors in industrial plants are usually low due to the inductive or reactive nature of induction motors, transformers, lighting and certain other industrial process equipment. Low power factor is costly. Low power factor also reduces the amount of real power that a plant electrical distribution system can handle. Low power factor increases line currents that will increase losses in a plant's distribution system.

Power factor can be improved through the use of synchronous motors in the power system or by the use of properly sized power factor correction capacitors. These corrective measures offset or reduce the KVAR — reactive component.

Just as the efficiency of any induction motor is reduced as its load decreases, the same is true for the power factor only at a faster rate of decline.

Factors affecting efficiency of induction motors

How do system parameters and motor characteristics relate to the efficiency at which a motor operates ?

Voltage and frequency operation at other than rated voltage and frequency may decrease efficiency and adversely affect other performance characteristics. The precise effect depends on the individual motor design. Table 1 indicates the effect of voltage and frequency variation on the performance of the motor.

Voltage unbalance — A balanced 3 — phase supply is essential to efficient operation. A voltage unbalance of 3.5 per cent can increase the motor losses by about 20 per cent. Care must be exercised threfore, to allocate loads equally when taking single-phase loads from a 3-phase supply.

Load — Motor efficiency changes as the load changes. Operation at loads substantially different from rated load may also result in a change in efficiency (Fig. 1).

Horsepower — The efficiency of a motor operating at rated load increases as the motor horsepower rating increases. High HP motors are more efficient.

Speed — For the same horse power rating, motors with higher speed generally have a higher efficiency at rated load than motors with lower rated speeds. Table 2 compares 5 HP motors as to performance at various speeds.

This does not mean that it is wise to use a high-speed motor and then use pulleys and gears or other speed changing mechanisms to produce the speed required by the load. The additional power losses could reduce the system efficiency to a value lower than that obtained by a direct drive, lower-speed motor.

Slip — Slip is a measure of the losses in the rotor winding of a polyphase induction motor. Therefore, the higher the slip, the lower the efficiency. For applications involving pulsating inertia loads, such as punch press or oil well pumping, the overall efficiency of motors with high slip may be higher than that of motors having a slip of less than 5 per cent. High-slip motors may be necessary for applications requiring high starting torque.

Table I : Effect of variation of voltage and frequency on the characteristics of motor

Characteristics	Voltage		Frequency	
	110%	90%	105%	95%
Torque				
Starting and Maximum	Increase 21%	Decrease 19%	Decrease 10%	Increase 11%
Speed				
Synchronous	No Change	No Change	Increase 5%	Decrease 5%
Full Load	Increase 1%	Decrease 1.5%	Increase 5%	Decrease 5%
Current				
No Load	Increase 10-15%	Decrease 10-12%	Decrease 5-6%	Increase 5-6%
Starting	Increase 10-12%	Decrease 10-12%	Decrease 5-6%	Increase 5-6%
Full Load	Decrease 7%	Increase 11%	Slight Decrease	Slight Increase
Temp Rise	Decrease 3-4°C	Increase 6-7°C	,,	,,
Over Load Capacity	Increase 21%	Decrease 19%	,,	,,
Mag. Noise	Slight Increase	Slight Decrease	,,	,,
Efficiency				
Full Load	Increase 0.5-1%	Decrease 2%	Slight Increase	Slight Decrease
Power Factor				
Full Load	Decrease 3%	Increase 1%	Slight Increase	Slight Decrease

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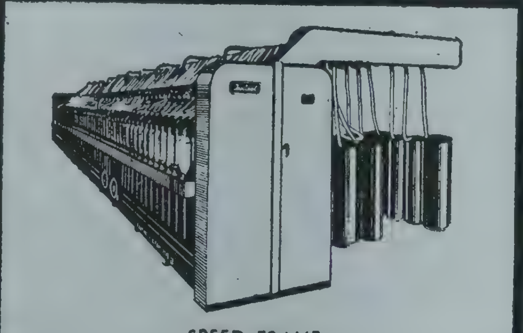
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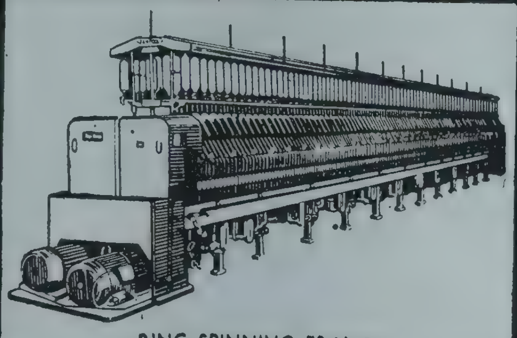
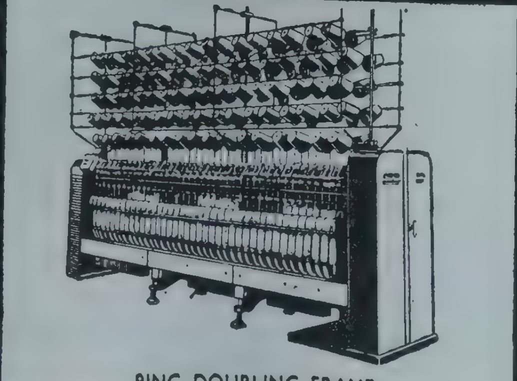
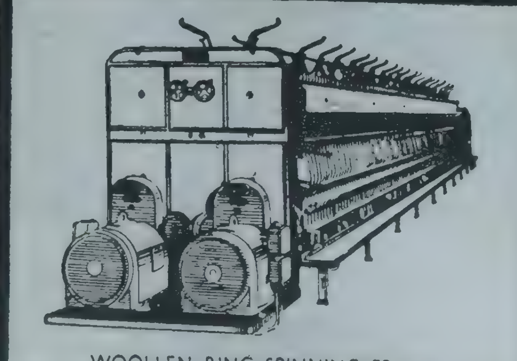
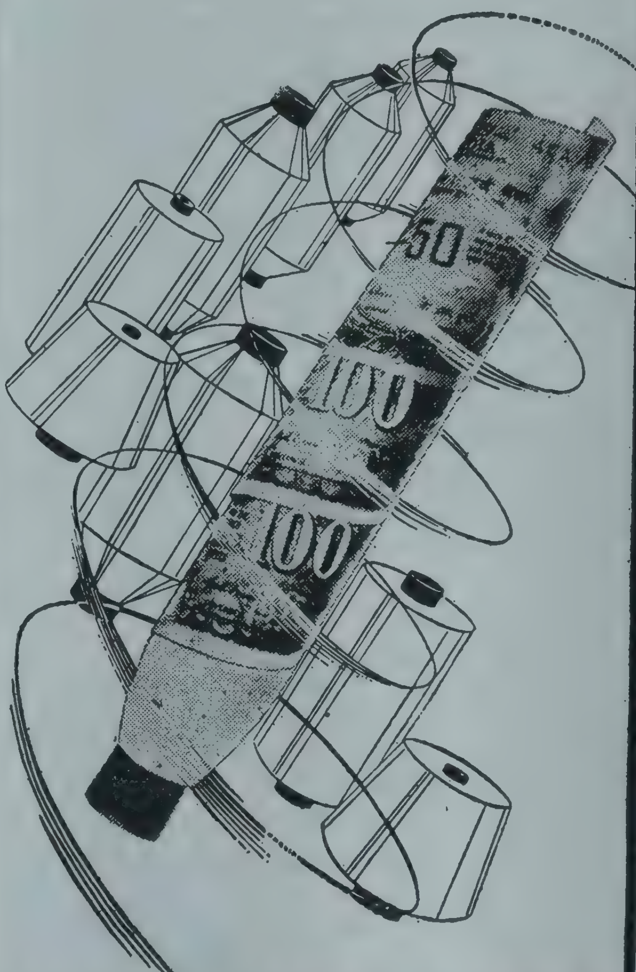
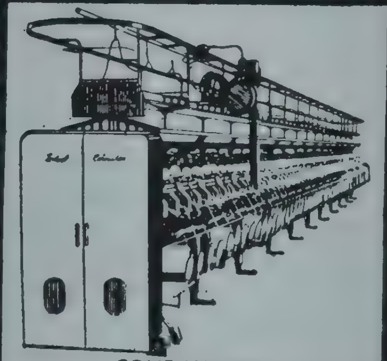
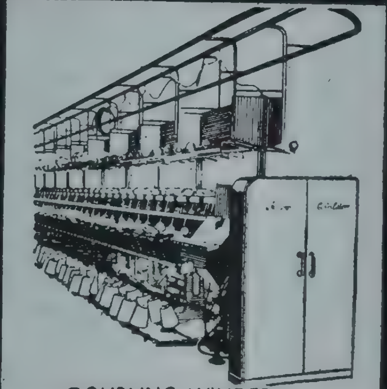

RING SPINNING FRAME

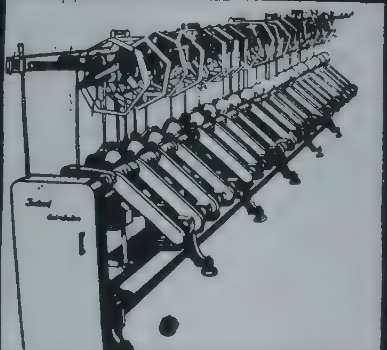

RING DOUBLING FRAME

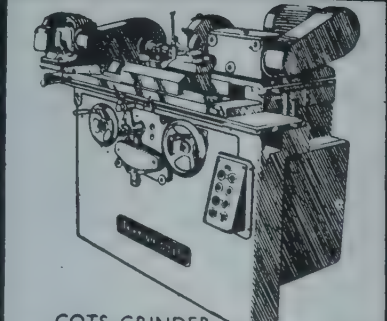

WOOLLEN RING SPINNING FRAME




CONE WINDER


DOUBLING WINDER


HANK TO CONE WINDER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Multi-speed designs — The efficiency of a multispeed motor at each operating speed is somewhat lower than that of a single-speed motor having a comparable rating. Single winding multi-speed motors are generally more efficient than two winding multispeed motors, and it may be possible to make a significant saving in energy by operating on low speed whenever possible and using high speed only when necessary.

Duty cycle — Motors that operate continuously and for long periods of time provide energy reducing opportunities. A small change in motor efficiency will make a significant change in total energy consumed. Examples are pumps, fans, blowers etc.

Selection of motors for energy conservation

High efficiency motors—In the recent past, users of electric motors have considered other factors such as size, weight and various operating characteristics as being far more important than the efficiency of the motor. At the same time, the motor's first cost was considered more important than its lifetime operating (power consumption) costs. However, with the rise in the power rates, cost evaluation is focussing more attention on motor operating efficiency. At present, running cost of a motor even for a year is much more than the initial capital cost of the motor. As energy costs continue to escalate rapidly, it becomes profitable for users to evaluate motor on a life cycle cost basis (*i.e.* initial cost and operating cost). With high energy costs it is profitable to pay higher initial cost for a premium efficiency motor and reap the saving in energy cost for differences during the life of the motor.

The impact of motor efficiency on operating costs is highlighted in Table 3 for 20 HP motor driving a ring frame in a textile mill.

Type of motor—Selecting "high efficiency" motors is not always the only answer to lowering watts losses and achieving higher efficiency. Many times, a rather simple upgrading of the motor type from a single phase split phase to a single phase, capacitor start capacitor run can improve efficiency. Where power supply permits, changing from a single phase to a three phase improves efficiency and reduces watts loss.

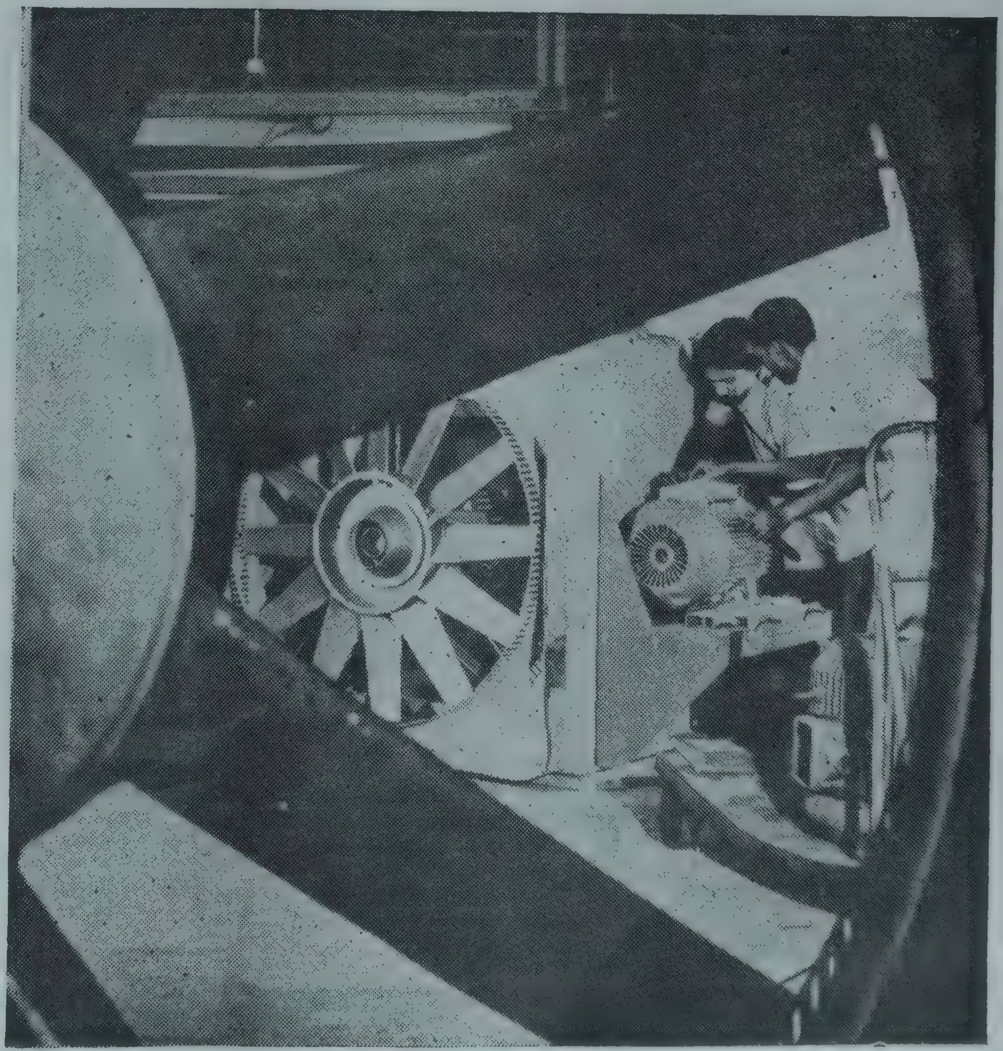
Motor rating—One of the most common source of increased motor watt loss is the result of a motor not being properly matched to its load. The use of motors having an output rating greater than the load requires, can cause a reduction in operating efficiency and in the system power factor (Fig. 1) that results in added losses in the distribution system. In application where motors

Table 2: Comparison of 5 H.P. motors of different speeds

5 Horse Power						
Motor speed (syn) ..	3000	1500	1000	750	600	500
No. of poles	2	4	6	8	10	12
Efficiency%	85	84	83	81	78	76
Power factor	0.89	0.84	0.77	0.76	0.72	0.64
Weight%	80	100	128	186	236	280

Table 3 : Efficiency of motor

	A	B
1. Motor rating H.P.	20	20
2. Motor efficiency	89.5	87.0
3. Initial cost Rs	7095	6795
4. Interest and Depreciation (30% per year)	1419	1359
5. Input power KW	16.67	17.15
6 Consumption per annum KWH (5000 hrs in a year)	83350	85747
7. Running cost (Rs 0.30/KWH)	25005	25724
8. Total recurring annual cost Rs (7) + (4)	26424	27083
9. Recurring cost for 15 years Rs (Life of motor)	396360	406245
10. Life cycle cost (3) (9)	403455	413034



A motor being replaced

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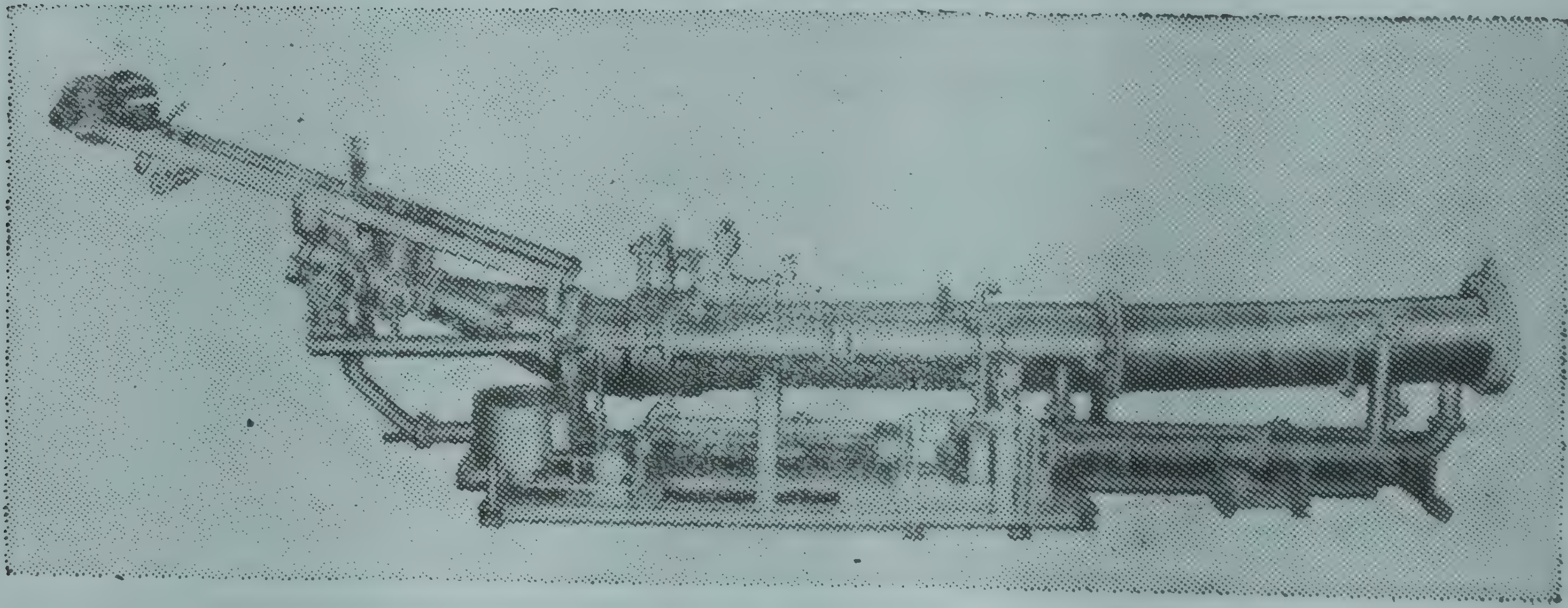

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run idle for an extended period of time at no load, energy could be saved by shutting down the motor and restarting it at the next load period.

Table 4 shows three different alternatives. In first case a correct HP motor is operating on a spinning frame and is loaded to 10 HP. In second case the same machine is driven by a 15 HP motor which is loaded to 2/3 load (*i.e.* 10 HP) and in the third case 20 HP motor is loaded to ½ load.

Special motors for textile industry

Special motors are required for textile industry basically on account of three factors: (1) Special environmental, (2) operating and (3) drive conditions.

Using a standard motor in such cases would only result in unsatisfactory performance, more energy losses, reduced life and greater hazard. The present day trend is therefore to use specially designed motors for textile industry. Table 5 summarises the special features of motors for textile industry.

The following Indian standards on motors for various textile applications are given here as guidelines for motor selections.

IS 2972	Part I	Loom motors
IS 2972	Part II	Card motors
IS 2972	Part III	Ring frame motors

'Clean flow' construction

Normally considerable amount of cotton fluff is present in textile mills. The fluff has a tendency to accumulate on the fan cover grids as well as in the ventilation passage. Accumulation of fluff leads to restriction in motor ventilation, which results in increase in motor heating and motor losses and ultimately burning out of the winding. TEFC Motors with 'clean flow' construction (Fig 2) are suitable for applications such as spinning, doubling, ring frame, draw frame, fly frame, speed frame etc where a moderate amount of fluff is present. Table 6 compares the energy consumption and insulation life of standard motor v/s. Motor with clean flow construction driving a ring frame.

Motor for pump application

Pumps are important components in most industrial installations and even relatively small energy savings per pump will mount up on an industry and national basis.

Most pump drives have fixed-speed electric motors and the volume of liquid is controlled by valves or by on-off control of the pumps. These crude control methods are often very wasteful, since much of the energy is used to work

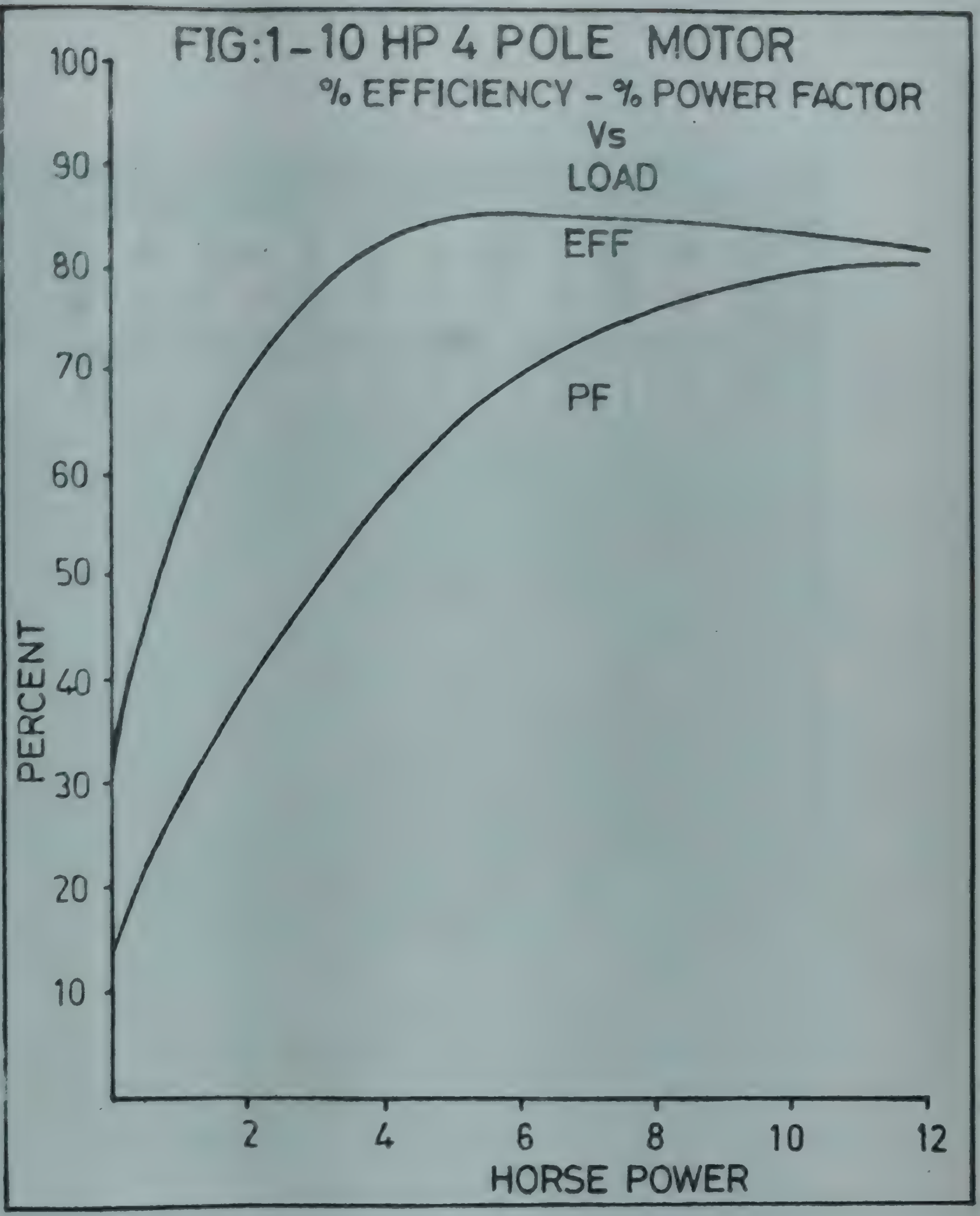
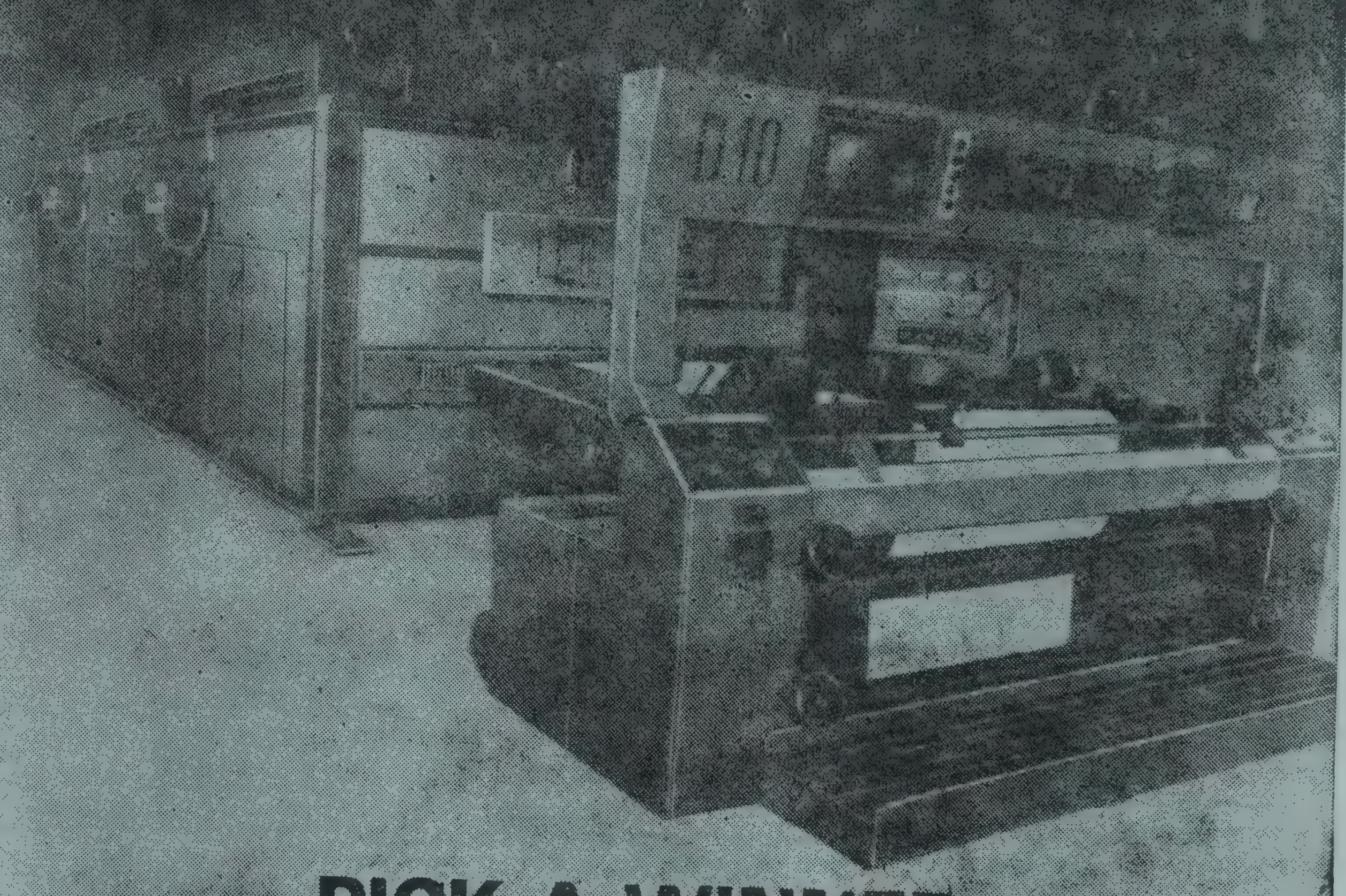


FIG:1-10 HP 4 POLE MOTOR
% EFFICIENCY - % POWER FACTOR Vs LOAD

Table 4: Use of oversized motor

	Case I	Case 2	Case 3
	7.5 KW Motor loaded to full load	11 KW Motor loaded to 2/3 load	15 KW Motor loaded to 1/2 load
Motor load	7.5 KW (10 H.P.)	7.5 KW (10 H.P.)	7.5 KW (10 H.P.)
Motor efficiency%	88	84	79
Motor input in KW	8.5	9.0	9.5
Unit consumed (5000 hrs in a year) ..	42500	45000	47500
Cost Rs (at Rs 0.30 per unit)	12750	13500	14250

HARISH D10
THE ELECTRONIC STENTER



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The D 10 is available optionally with a gas burning system or with an oil burning system and helps save over 20% of fuel losses.

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Table 5: Characteristics of squirrel cage induction motors used for textile application

Application	Indian Standard	KW range	Speed RPM	Mounting	Enclosure	Starting torque %FLT	Break-down torque %FLT	Remarks
Ginning	..	Upto 7.5	1500	Foot	TEFC	Std.	Std.	
Carding	IS 2972 (Part II)	1.1-2.2	1000/750	Foot/lug with spring base	TE	Min. 6P-350 8P-275	Min 6P-375 8P-300	
Drawing frame ..	..	Upto 3.7	1500	Foot/Flange	TEFC	Std.	Std.	Uniform acceleration characteristic. Similar to spinning frame motors preferred.
Speed frame	..	Upto 7.5	1500	Foot	TEFC	Std.	Std.	
Spinning and doubling	IS 2972 (Part III)	Upto 22	1500 or 1000	Foot	TEFC	150-200	200-275	Two single speed motors or one two speed motor used. Uniform accelaration characteristic required.
Weaving (Loom) ..	IS 2972 (Part I)	0.37-2.2	1000 or 750	Foot/Flat base/lug with spring base	TE	Min. 6P-230 8P-200	Min. 6P-270 8P-230	Plain, semi-automatic and automatic. Lower stg. torque permissible in case of clutch drive.
Pneumafil	..	1.1-2.2	3000	Food/Flange/Rod	TEFC (Card appln). TE (draw frame and ring frame appln.)	Std	Std.	Motor required to be very compact when mounted inside the filter box.

FIG :2 - CLEAN FLOW CONSTRUCTION

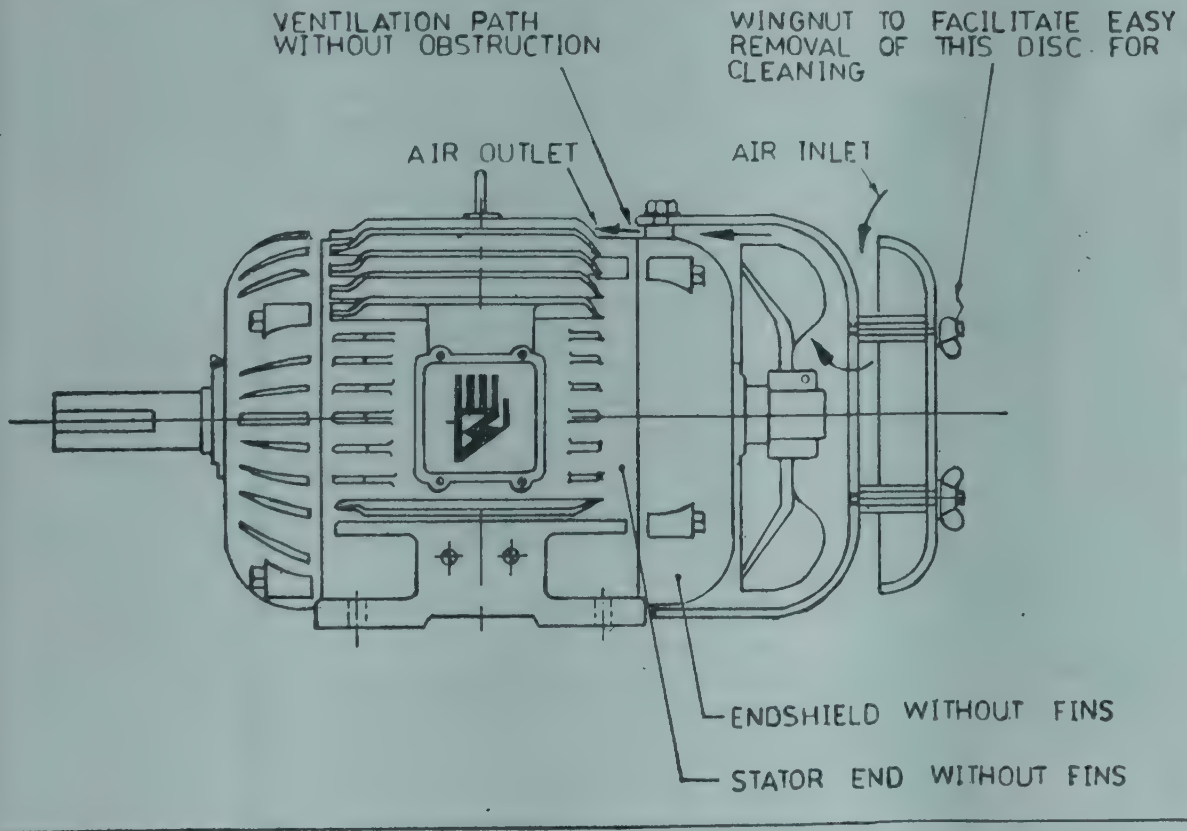

VENTILATION PATH WITHOUT OBSTRUCTION
WINGNUT TO FACILITATE EASY REMOVAL OF THIS DISC FOR CLEANING
AIR OUTLET
AIR INLET
ENDSHIELD WITHOUT FINS
STATOR END WITHOUT FINS

Table 6: Motors operating in cotton fluff atmosphere

	Standard TEFC motor	Clean flow construction Motor
H.P.	20	20
Winding Temp.	125	105
Efficiency	88.5	89.5
Energy consumed KWH (5000 hrs in a year)	84290	83350
Running cost Rs	29500	29170
Insulation life hrs	30000	100,000

Note: Winding temperature of standard motor when operated in cotton fluff atmosphere is higher by 20°C and the efficiency is reduced by 1% due to higher I^2r losses.

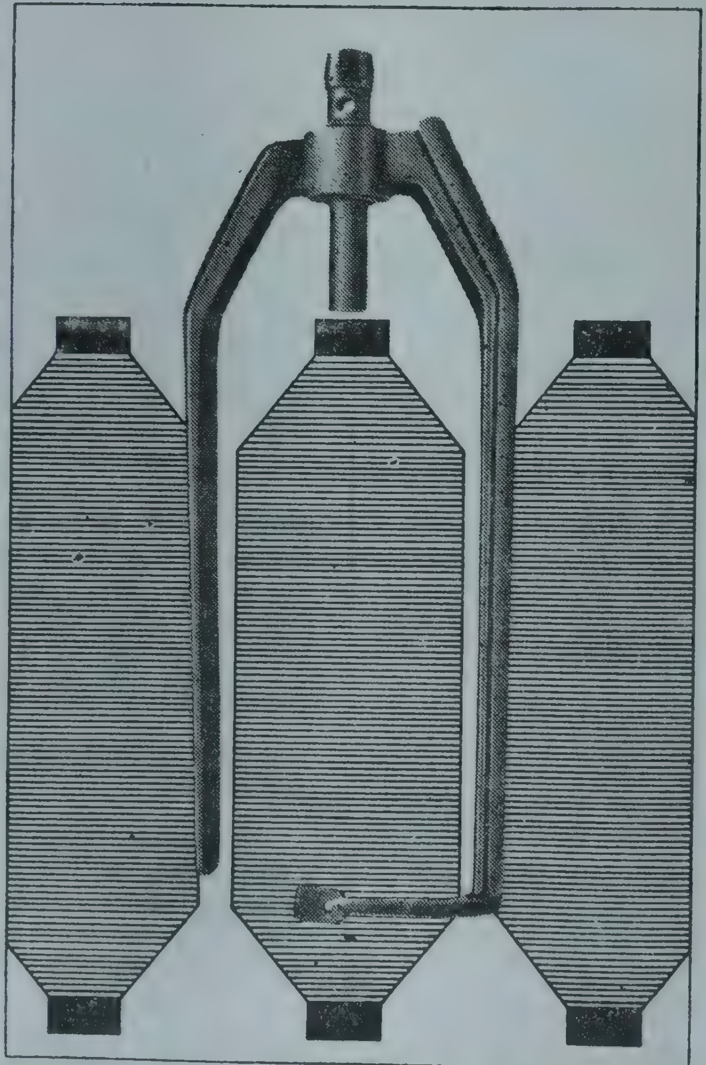
against valves which are partly closed. As a general rule, savings in power consumption of 50 per cent or more can be obtained by using speed control instead of valve control in most pump installation. The squirrel-cage motor used to have only one disadvantage the difficulty of controlling its speed. However, the arrival of the frequency converter has now removed this obstacle. Each pump is designed to operate within a certain range. This range is defined by various factors and is normally known as operating range for a pump. Beyond this operating range the pump efficiency is quite poor and it is uneconomical to operate in the long run.

Variable speed drives for processing machinery

Standard motors are used for machines such as bleaching, washing and drying machines and for their pumps, fans and associated auxiliaries, although low driven speeds often entail geared motor units or low speed motors. Dye jig and winch dyeing machines are fitted with variable speed control for approximately constant linear speed and tension calendered small mangles and other machines requiring speed control over a range upto 2 to 1, with or without reversing are normally driven by slipring motors with drum type controllers. The latter may also be arranged to give threading speeds.

Many machines require a greater speed range and control of speeds at various points, *e.g.* cloth printing machines, stentering ranges, sanforising machines and normally variable speeds drives such as A.C. commutator motor

High Speed Aluminium Alloy Flyers



- Steel middle piece insert hardened for maximum resistance to wear and tear.
- Transverse pin made from high tensile steel, provides positive drive.
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- Interior surface of hollow arm highly polished on special imported equipment, resulting in minimal frictional resistance.
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or the more precise and expensive Ward-Leonard are used.

In a slipring motor running at 50 per cent of its rated speed, the rotor copper loss alone is equal to output power. The efficiency of slipring motor at reduced speed therefore is poor. This also applies to eddy current coupling motor.

Thyristor controlled DC drive is certainly more costlier than slipring motors but besides its other advantages its saving in energy itself can justify its high cost for certain applications. Comparison of costs of different drives for some of the textile applications is given in Table 7.

Table 7: Drives for processing machinery

Machine details	Motor rating KW	Cost of power consumption in Rs per year		Saving Rs	Investment Rs	Pay back period month
		Slip ring motors	D.C. motors with rectifiers			
Printing machine (4 colours)	37	62320	33280	29140	54000	22
Printing machine (6 colours)	40	66820	35690	31130	54000	21
Drying range mercerising	11	21090	11580	9510	24000	30
Sizing machine	9.3	28805	16055	9830	3000	27

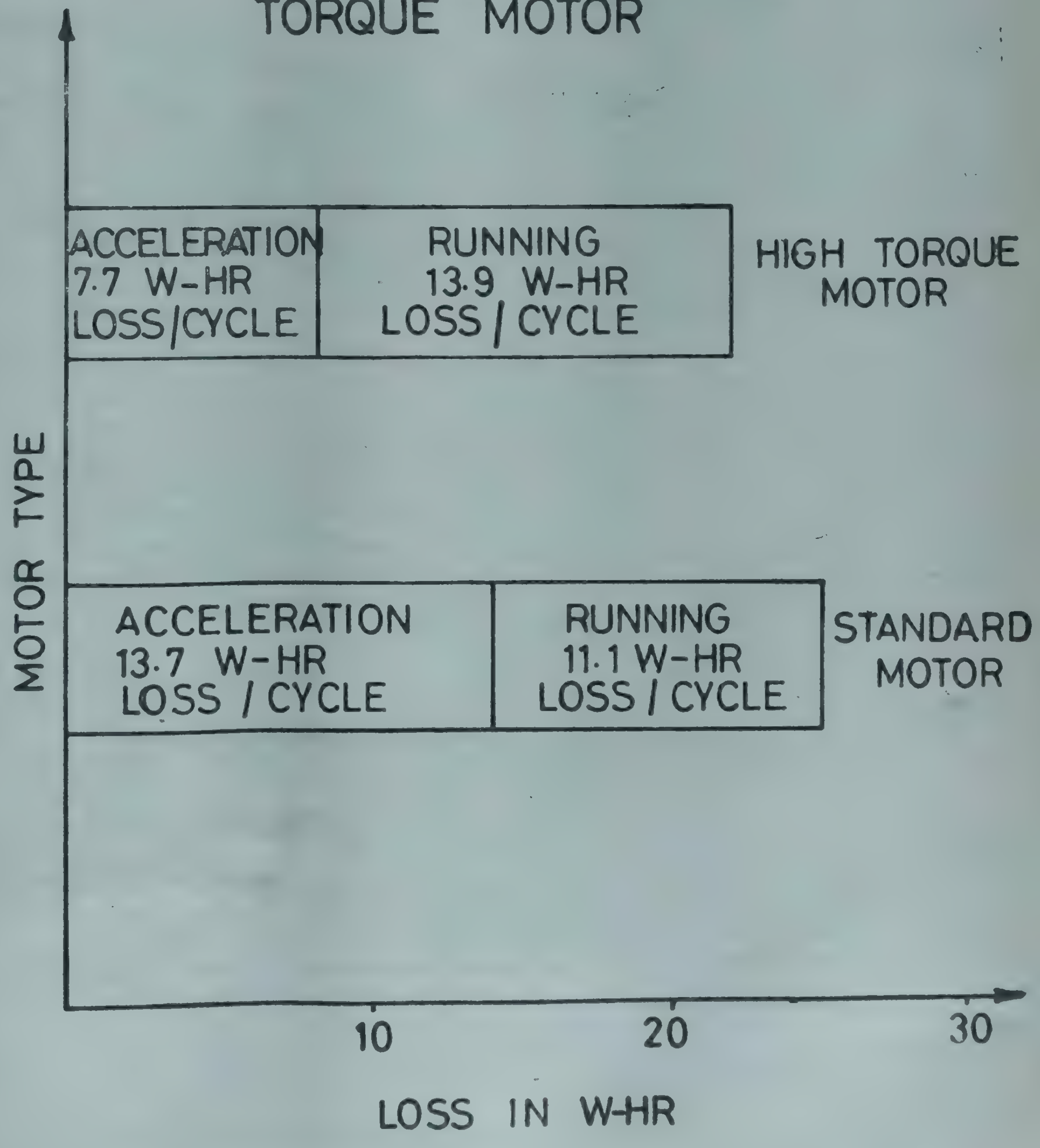
System considerations

The efficiency of an electrical system, of which the motor is a part, is the combination of the efficiencies of all the system components and is affected by many factors. The following are typical.

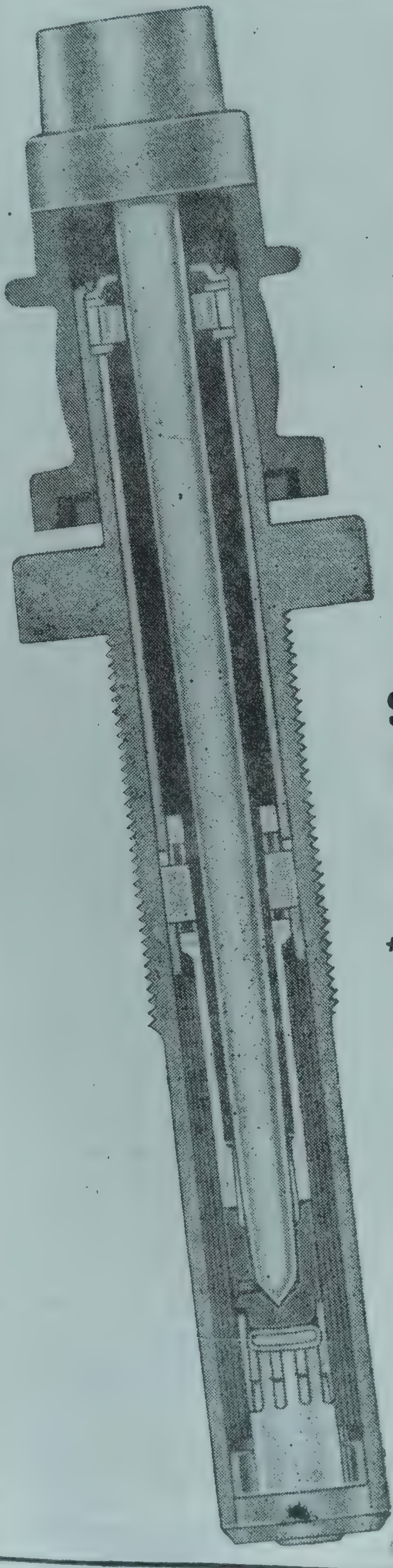
Application analysis: Widely varying loads with a number of starts and stops deserve careful study. The starts and stops, as well as plugging reversals and braking all consume energy at a higher rate than during continuous operation. To minimise energy usage, the mass of the moving parts should be kept as low as possible—energy used to accelerate these parts is proportional to their mass. And special care should be taken to select the motor best suited for the job. Motors designed for high full-load efficiency may be unsuitable where frequent starting, duty cycle operation, and repetitive shock loading are encountered. In these applications, total energy losses including motor acceleration losses as well as motor running losses must be considered.

Fig. 3 compares the watts loss of a 80.5 per cent efficient high torque motor and a 83.4 per cent efficient standard design 5 HP motor on a duty cycle that accelerates a load inertia of 1.14 kgM² to full speed and runs at full load for 60 seconds. The high torque motor is able to accelerate the load inertia with less energy and has a lower watts loss during acceleration than a standard motor. The standard motor is more efficient and has less energy loss than the high torque motor during the actual run cycle. Combining both the acceleration and run losses completing the duty cycle clearly indicates that the high torque motor is the best energy choice inspite of having a lower efficiency.

FIG:3 ENERGY USAGE COMPARISON - STANDARD MOTOR VS HIGH TORQUE MOTOR



Process and machinery: Alternate means of accomplishing a job are frequently available. The most efficient methods and machinery should be selected after which the appropriate motor



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type and rating consistant with system economics can be specified.

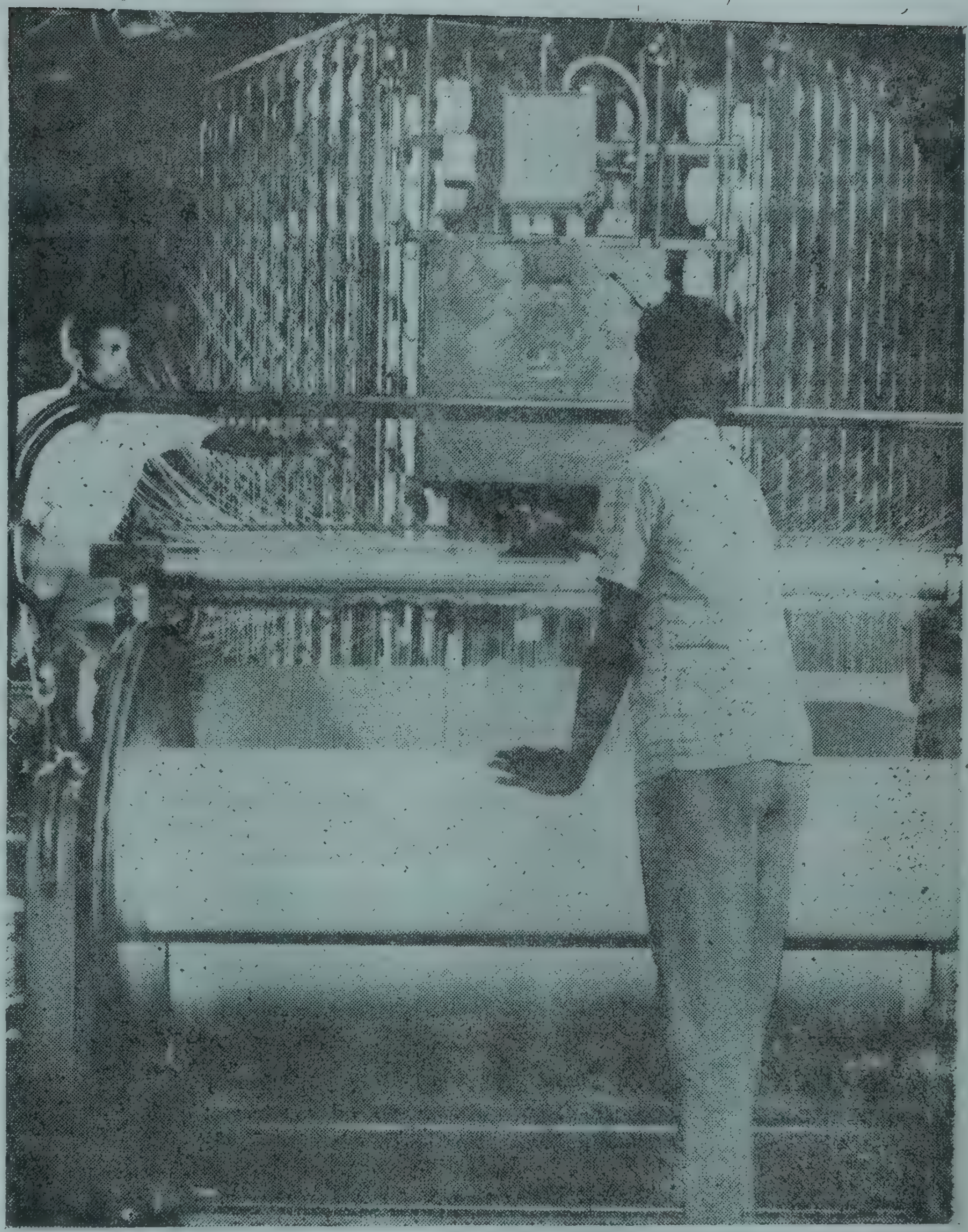
First cost and long-range energy costs: Where loads and speeds very, the system can vary widely in first cost and in operating efficiency, depending on the drive selected multispeed or adjustable speed motors *vs* throttling control or a high speed motor with speed reduction *vs* a low speed motor.

Load shut down and shedding

Where motors run for an extended period of time at no load between loaded periods, energy may be saved by shutting down the motor and restarting it for the next load period. For example, consider a 4-pole, 15 HP induction motor driving a load with inertia equal to the motor inertia. One acceleration will use 7,000 kw-sec of energy, and no load losses are 500 watts. The energy consumed by one start is thus equivalent to running the motor at no load for 7,000/500 or 14 seconds, and energy can be saved between starts only if the rest period exceeds 14 seconds.

Other factors may affect the decision to shut down between starts the motor type and speed, restrictions on inrush current, the extra winding stress imposed by repeated accelerations, and the need for cooling (heat dissipation could be greater when the motor is running at no load than when it is de-energised). Smaller motors with external inertia equal to rotor inertia may be started as frequently as one per minute. As motor size and/or connected load inertia increase, frequency of starts must be reduced.

In applications where motors run continuously, such as ventilating fan loads. load shedding may be used to conserve energy the apparatus is cycled off for a short period of time each hour. The energy balance and the motor's thermal capability will be affected as discussed above.



A Barber-Colman warper in operation.

Group vs individual drive : For extensions and replacements, individually driven machines are now almost invariably used. The new textile machinery now has the motor and starter built in as an integral part. The use of individual motors and associated equipment involves appreciably higher expenditure than group drive. Against this higher cost must be balanced the many advantages of the individual machine drive in production, quality and convenience aspects, amongst which are :—

The inherent facilities for overtime working and freedom from complete stoppage, even drive, minimum transmission losses and power consumption; absence of line shafting improves natural and artificial lighting.

Table 8 compares the energy consumption by 100 nos. ring frames with individual drive *vs* group drive.

Table 8 : Individual drive Vs group drive

		Individual drive	Group drive
1.	No. of ring frames	100	100
2.	Load per ring frame HP	20	20
3.	No. of motors	100	5
4.	HP of each motor	20	400
5.	Load on each motor HP	20	353
6.	Efficiency of motor at load as (5) above	89	93
7.	Input power kW .. .. (only 75 ring frames operating)	1250	1416
8.	Units consumed kWH .. .. (5000 Hrs in a year)	6,250,000	7,080,000
9.	Cost Rs. .. .. (at Rs 0.30 per unit)	1,875,000	2,124,000

Note: In case of group drives transmission losses are assumed as 15 .

Maintenance

Too often motor maintenance is neglected. A basic maintenance programme involving periodic inspection and the correction of unsatisfactory conditions will prolong the life of motor.

Efficiency can be reduced as additional friction develops within the driven machine because of the buildup of dust on a fan, misalignment of gears or belts because of the wearing of parts, or insufficient lubrication. The motor has to work harder. reducing system efficiency and increases energy consumption. Regular inspection will detect such conditions.

Every motor should be periodically inspected and unsatisfactory conditions corrected. Items to be checked include, ventilation and presence of dirt and contaminants which can increase motor heating and motor losses; motor and load alignment; belts, sheaves and couplings; tightness of hold down belts; and improper lubrication can increase a motor's load and use up additional energy.

Electrical lighting

The following points may be considered at time of selecting lighting system : (1) Required level of illumination for different works area; (2) Lighting source; (3) Maintenance and control.

The steps which will be quite effective towards energy conservation for lighting system are as follows : (1) Review on group switching; (2) Replacement of in-efficient lights; (3) Increase in efficiency of dispersal; (4) Photo cell operated switch for streets and yard lights.

In textile mills, fluff obscures shed lighting efficiency. Shed lights become defused due to the fluff deposition on the fittings. Cleaning and removing fluff etc from reflectors and tube lights would enable reducing the number of tubes without affecting lighting efficiency.

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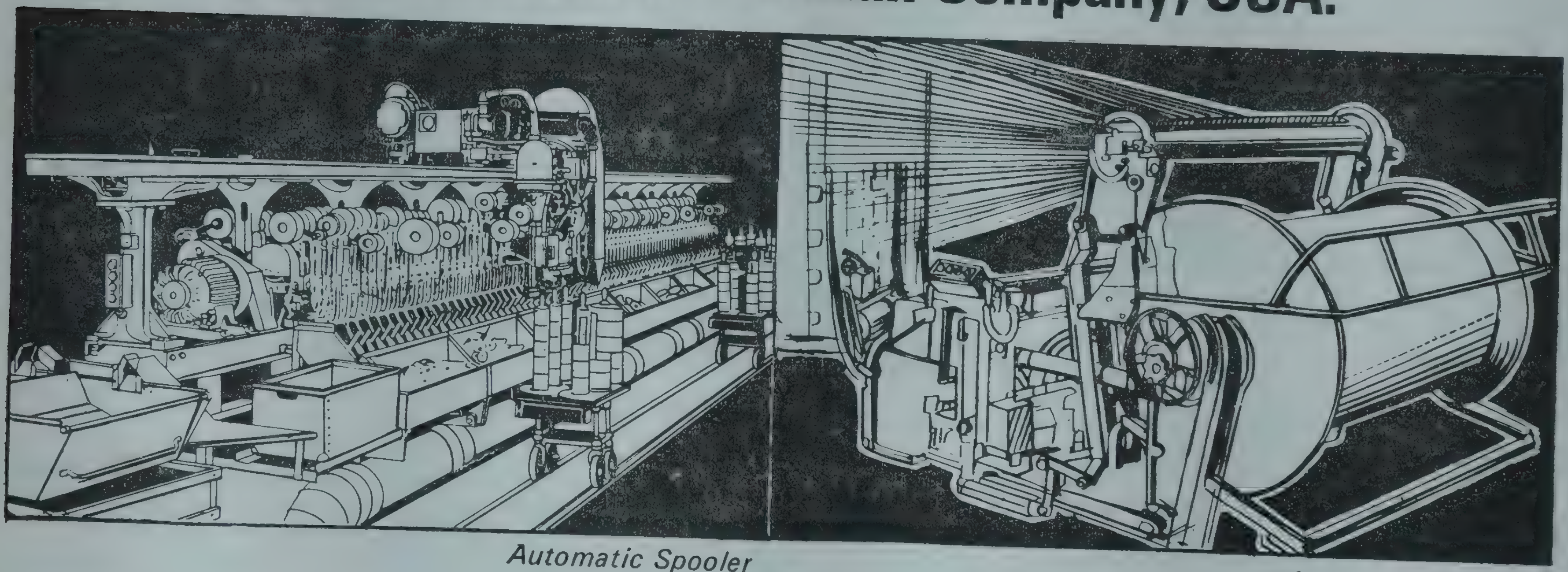

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Progressive re-circulation of the exhaust-heat recovery system

Normally, the major evaporation of the water from fabric takes place in the initial chambers whereas the air that is exhausted from the subsequent chambers contains very little moisture. This results in too much wastage of heat through exhaust. In progressive re-circulation, the exhaust of the following chambers is re-circulated to the preceding chambers and the final exhaust takes place only from the first chamber under controlled conditions. This results in about 20 per cent fuel saving.

Direct firing

On the D-10 stenter, direct firing can be incorporated *i.e.* high speed diesel oil or gas is fired directly in the stenter. There is no necessity of steam, electrical or thermic fluid heating as any temperature can be attained and at the same time combustion is 100 per cent. Specially imported burners are used to achieve perfect combustion. Obviously this saves substantial fuel cost. The diesel consumption per chamber is only about seven litres per hour on an average. It is not compulsory to have direct firing arrangement on a D-10 stenter which can also be used with steam, electrical or thermic fluid heating. Naturally, the choice of the heating arrangement depends on the local prices of the various fuels.

Overfeed computer

This computer measures the actual shrinkage at the delivery end and accordingly automatically sets the overfeed to get a constant shrinkage while heat setting.

Closed circuit TV

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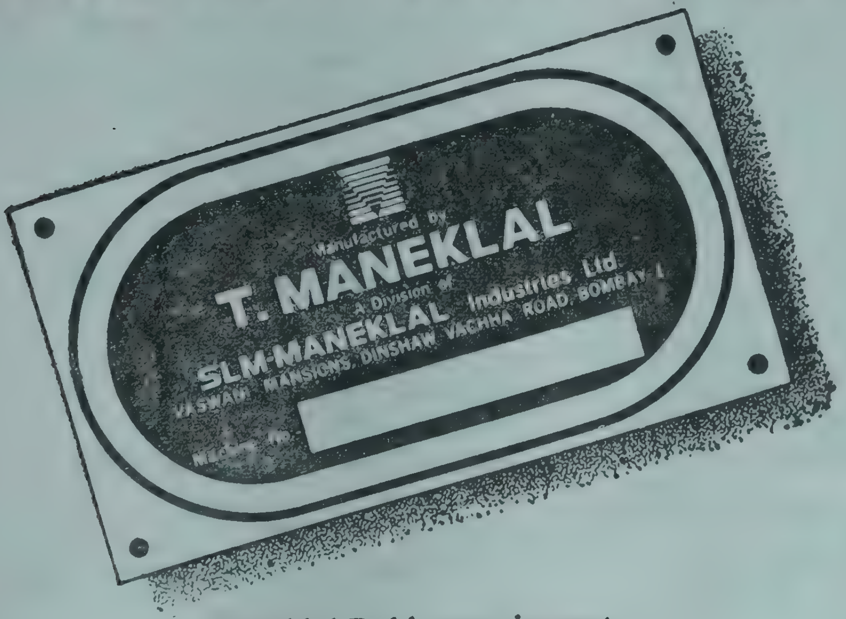
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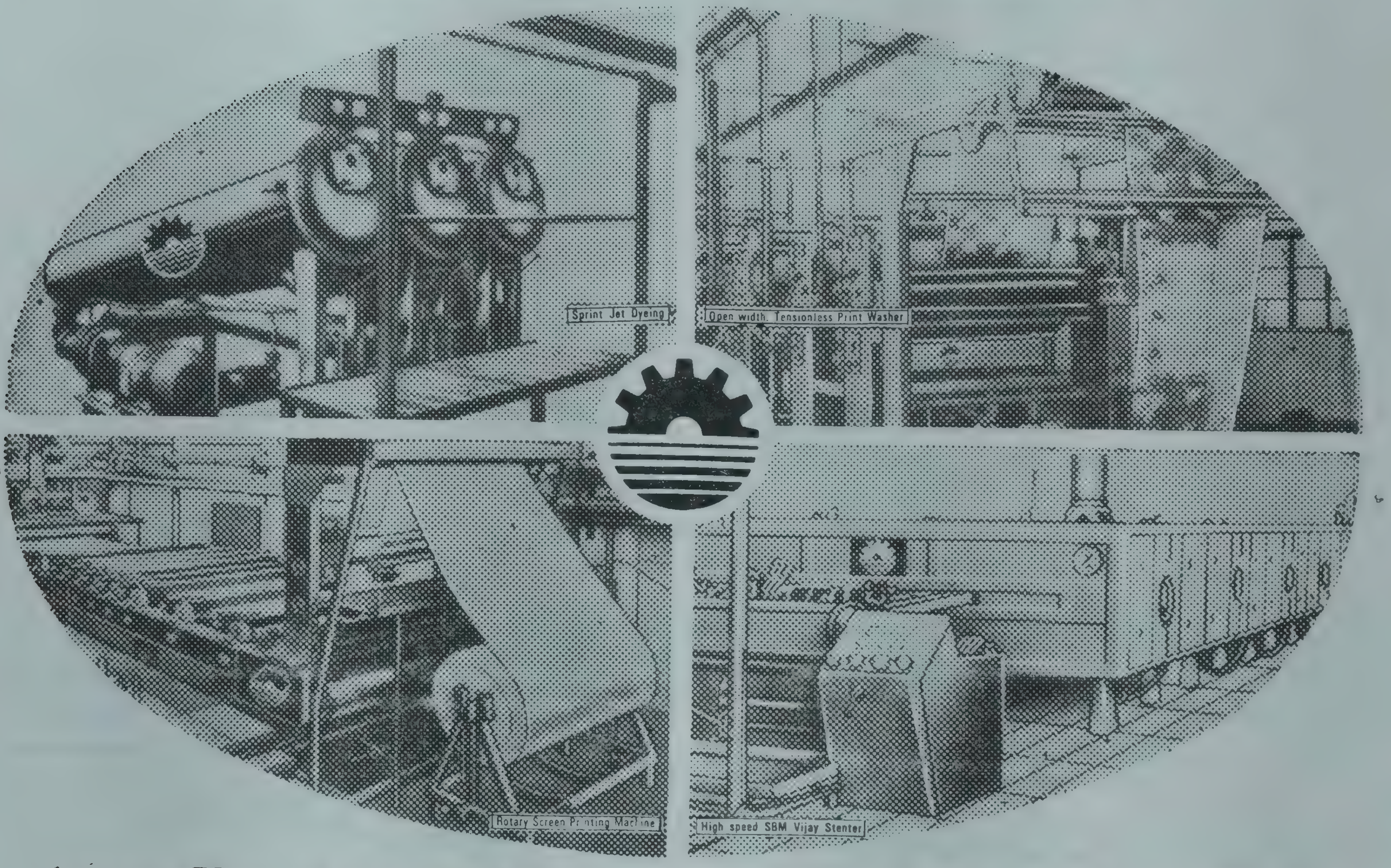

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STATISTICS

By Commerce Research Bureau

Imports

(Rs crores)

Year	Machinery	Spares & accessories	Total
1970-71	3.3	5.6	8.9
1971-72	2.2	10.5	12.7
1972-73	4.0	12.4	16.4
1973-74	5.6	11.6	17.2
1974-75	6.0	10.7	16.7
1975-76	4.9	12.4	17.3
1976-77	5.0	8.4	13.4
1977-78	8.3	18.3	26.6
1978-79	13.7	21.7	35.4

Source : Office of the Textile Commissioner, Government of India, **Indian Textile Bulletin,** Annual Number 1979

Compiled by Commerce Research Bureau.

Production trends

(Rs crores)

Year	Textile machinery			Components and accessories	Total production
	Installed capacity	Production	Capacity utilisation		
(1)	(2)	(3)	(4)	(5)	(3+5)
1969	—	19.91	—	17.02	36.93
1970	70.00	30.23	43.1	25.88	56.11
1971	67.00	36.04	63.7	30.38	66.42
1972	—	30.60	—	37.73	68.33
1973	180.00	42.73	23.7	42.43	85.16
1974	200.00	72.50	36.2	54.74	127.24
1975	215.00	76.94	35.7	53.51	130.45
1976	225.00	92.39	41.0	54.22	146.61
1977	215.00	85.08	39.5	53.02	138.10
1978	230.00	121.72	52.9	63.95	185.67
1979	—	158.41	—	67.15	225.56

Note : (—) = Not available

SOURCES : (i) Association of Indian Engineering Industry, **Handbook of Statistics,** various issues.
(ii) Office of the Textile Commissioner, Government of India, **Indian Textile Bulletin,** Annual Number 1979

Compiled by Commerce Research Bureau

Exports

(Rs. crores)

Year	Machinery	Spares & accessories	Total
1970-71	3.5	3.6	7.1
1971-72	3.1	1.7	4.8
1972-73	2.1	1.6	3.7
1973-74	1.6	2.6	4.2
1974-75	7.1	8.4	15.5
1975-76	10.2	9.2	19.4
1976-77	8.2	5.2	13.4
1977-78	3.3	4.1	7.4
1978-79	..	..	..

(..) = Not available

Source : Office of the Textile Commissioner, Government of India, **Indian Textile Bulletin,** Annual Number 1979.

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Value of machinery added by mills for rehabilitation, modernisation and expansion

(Rs crores)

Description	1976			1977			1978		
	For rehabilitation modernisation	For expansion	Total	For rehabilitation modernisation	For expansion	Total	For rehabilitation modernisation	For expansion	Total
Spinning & preparatory	7.03 (24.5)	8.13 (29.9)	15.6 (27.1)	8.23 (25.1)	6.75 (24.4)	14.98 (24.7)	16.22 (26.6)	14.90 (31.4)	31.12 (28.7)
Spinning	10.16 (35.3)	9.69 (35.6)	19.85 (35.4)	10.18 (31.0)	8.92 (32.2)	19.10 (31.6)	16.07 (26.4)	14.54 (30.7)	30.61 (28.2)
Total spinning department	17.19 (59.8)	17.82 (65.5)	35.01 (62.5)	18.41 (56.1)	15.67 (56.6)	34.08 (56.3)	32.29 (53.0)	29.44 (62.1)	61.73 (56.9)
Weaving preparatory	3.27 (11.4)	2.79 (10.2)	6.06 (10.8)	2.73 (8.3)	2.36 (8.5)	5.09 (8.4)	3.70 (6.1)	2.90 (6.1)	6.60 (6.1)
Weaving	3.67 (12.8)	1.27 (4.7)	4.94 (8.8)	4.36 (13.3)	1.88 (6.8)	6.24 (10.3)	13.71 (22.5)	1.94 (4.1)	15.65 (14.5)
Total weaving department	6.94 (24.2)	4.06 (14.9)	11.00 (19 6)	7.09 (21.6)	4.24 (15.3)	11.33 (18.7)	17.41 (28.6)	4.84 (10.2)	22.25 (20.6)
Bleaching	1.03 (3.6)	1.35 (5.0)	2.38 (4.3)	1.09 (3.3)	0.59 (2.1)	1.68 (2.8)	1.21 (2.0)	0.86 (1.8)	2.07 (1.9)
Dyeing	0.85 (2.9)	0.87 (3.2)	1.72 (3.1)	2.13 (6.5)	1.73 (6.2)	3.86 (6.4)	1.19 (2.0)	2.84 (6.0)	4.03 (3.7)
Printing	1.00 (3.5)	1.70 (6.2)	2.70 (4.8)	1.26 (3.8)	3.23 (11.7)	4.49 (7.4)	3.33 (5.4)	3.37 (7.1)	6.70 (6.2)
Finishing	1.74 (6.0)	1.43 (5.2)	3.17 (5.7)	2.84 (8.7)	2.23 (8.1)	5.07 (8.4)	2.18 (3.6)	3.01 (6.3)	5.19 (4.8)
Total processing & finishing	4.62 (16.0)	5.35 (19.6)	9.97 (17.9)	7.32 (22.3)	7.78 (28.1)	15.10 (25.0)	7.91 (13.0)	10.08 (21.2)	17.99 (16.6)
Engineering	* *	* *	* *	* *	* *	* *	3.32 (5.4)	3.07 (6.5)	6.39 (5.9)
Grand Total	28.75 (100.0)	27.23 (100.0)	55.98 (100.0)	32.82 (100.0)	27.69 (100.0)	60.51 (100.0)	60.93 (100.0)	47.43 (100.0)	108.35 (100.0)

Note : * Separate figure not available

Figures in brackets indicate percentages to totals under the respective columns

Source : ICMF, Handbook of Statistics, 13th Edition
Compiled by Commerce Research Bureau

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Special Reports

Essential services: Strikes and go-slow punishable

New Delhi

THE Government of India assumed sweeping powers on July 27 to prohibit strikes in essential services which have been widely defined in an ordinance even to include the 42 industries in the public and private sectors listed in the scheduled category in the Industries Development and Regulation Act of 1951.

The Essential Services Maintenance Ordinance, 1981, issued by the President on that day, after a meeting of the Union Cabinet, says that the services in which strikes could be banned are posts and telegraphs, all forms of transport, airports, major ports, banking, customs, oilfields and refineries, defence, conservancy, sanitation and hospitals under the control of the Union Government as well as in the 42 scheduled industries.

Any person resorting to an illegal strike will be liable to be punished with imprisonment or fine. He will also be liable for disciplinary action including dismissal. The offences under the ordinance are cognisable and triable summarily. Go slow and refusal to work overtime where such work is necessary for the maintenance of any essential service is also punishable under the ordinance.

Initially the strikes will be banned for six months but the ban may be extended for a further period of six months. The Government proposes to introduce legislation in the forthcoming session of Parliament to replace the ordinance and the new act is expected to be valid for three years.

Predictably leaders of central trade unions have reacted violently against the ordinance. Some of the political leaders have also voiced their concern at the action taken by New Delhi and the Chief Minister of West Bengal, Mr Jyoti Basu, has described the ordinance as "thoroughly undemocratic". He said it amounted to emergency measures without emergency declaration.

Employers, however, have welcomed the ordinance, though, by and large they refused to comment on it. However, the president of the Indian Merchants' Chamber, Bombay, Mrs Sharayu Daftari, said that the ordinance was long overdue and "the effort is a good beginning".

The ordinance declares any person commencing a strike which is illegal under the ordinance or who instigates or incites other persons to commence or to go on any such strikes is liable to disciplinary action including dismissal. Further any person who goes on an illegal strike is punishable with imprisonment for a term which may extend to six months or to pay a fine which may extend to Rs 1,000 or with both.

The 42 industries listed in the scheduled category are: aircraft, arms and ammunition, coal, including coking and derivations; iron and steel, mathematical, surgical and drawing instruments;

Scientific instruments; motor and aviation fuel; kerosene, crude oils and synthetic oils; ships and other vessels propelled by steam or electricity or other mechanical power; sugar, telephones, telegraph and wireless communication apparatus;

Textiles, including cotton, jute, woollen, silk, artificial silk and staple

Strikes, lockouts and mandays lost: 1970 to 1980

Year	Strikes		Lockouts		Total	
	Number	Mandays lost ('000)	Number	Mandays lost ('000)	Number of strikes and lockouts	Mandays lost ('000)
1970	2,598	14,749 (71.7)	291	5,814 (28.3)	2,889	20,563
1971	2,478	11,803 (71.3)	274	4,743 (28.7)	2,752	16,546
1972	2,857	13,748 (66.9)	386	6,796 (33.0)	3,243	20,544
1973	2,958	13,862 (67.2)	412	6,764 (32.8)	3,370	20,626
1974	2,510	33,644 (83.6)	428	6,619 (16.4)	2,938	40,263
1975	1,644	16,706 (76.3)	299	5,195 (23.7)	1,943	21,901
1976	1,241	2,799 (22.0)	218	9,947 (78.0)	1,459	12,746
1977	2,691	13,410 (53.0)	426	11,910 (47.0)	3,117	25,320
1978	2,762	15,423 (54.4)	425	12,917 (45.6)	3,187	28,340
1979 (P)	2,714	35,118 (80.1)	354	8,748 (19.9)	3,068	43,866
1980 (P)	1,936	7,007 (54.3)	256	5,904 (45.7)	2,192	12,911

(P) = Provisional
Figures in brackets indicate the percentage of mandays lost due to strikes and lockouts.

Disputes and mandays lost by sectors: 1971 to 1980

Year	Public Sector		Private Sector		Total	
	No. of disputes	Mandays lost ('000)	No. of disputes	Mandays lost ('000)	No. of disputes	Mandays lost ('000)
1971	385	2,253	2,367	14,293	2,752	16,546
1972	538	3,346	2,705	17,198	3,243	20,544
1973	714	3,392	2,656	17,234	3,370	20,626
1974	597	13,088	2,341	27,175	2,938	40,263
1975	362	2,145	1,581	19,756	1,943	21,901
1976	153	872	1,306	11,874	1,459	12,746
1977	663	4,471	2,454	20,849	3,117	25,320
1978	947	4,348	2,240	23,992	3,187	28,340
1979 (P)	N.A.	7,656	N.A.	36,210	3,068	43,866
1980 (P)	N.A.	2,204	N.A.	10,707	2,192	12,911

(P) = Provisional N.A. = Not Available
Note: Disputes refer to strikes and lockouts.

fibre; automobiles; tractors; cement; electric pumps, electric fans, electric motors, heavy chemicals, including fertilisers;

Machinery used in industries, including boilers and steam generating equipment; ball, roller and tapered bearings; locomotives; rolling stock; machine tools; machinery and equipment for generation, transmission and distribution of electricity;

Non-ferrous metals, including alloys; paper, including newsprint, paper boards and straw boards; pharmaceuticals and drugs; power and industrial alcohol, rubber goods, leather, leather goods and pickers;

Glue an gelatin; vanaspati, vegetable oils; agricultural implements; batteries, dry cells and storage batteries, bicycles, hurricane lanterns, internal combustion engines, power-driven pumps, radio receivers, sewing machines, knitting machines, small tools, hand tools, glass and ceramics, dyestuffs, soaps, other toilet requisites, plywood and ferro-manganese.

Official sources have explained that the decision to ban strikes in the scheduled industry would be subject to a rider. Recourse would be taken to this drastic action only when disruption of service endangered the safety of an industrial undertaking or that of its employees or employers.

Some observers have interpreted the Government's action as a continuation of its fight against inflation inasmuch as maintenance and increasing of production is so essential in that fight.

Gas or coal-based fertiliser units?

From OUR NEW DELHI BUREAU

NEW DELHI

SINCE application of fertilisers has been a key element in India's agricultural advance, their consumption has been increasing with the result that indigenous production has not kept pace with the growth in fertiliser demand. Fertiliser production during the current year is estimated at 41 lakh tonnes against the projected demand of 66 lakh tonnes, which means that 25 lakh tonnes are to be imported. Expansion of indigenous fertiliser production in order to move towards self-sufficiency is, therefore, a major development objective. But the attainment of this objective involves a vital policy decision which is not entirely incontrovertible.

Should fertiliser plants of the future be based on a feedstock of oil derivatives, gas or coal? At present the Indian fertiliser industry is based mainly on oil derived feedstocks like naphtha, fuel oil and low sulphur heavy stocks. As such the industry has suffered from all the uncertainties and problems relating to oil supplies. The constraint of dependence on oil-derived feedstocks can be seen from the fact that in 1980-81 oil supply problems because of the Assam blockade resulted in the fertiliser production falling short of the target by 5.5 lakh tonnes and being even less than that in 1979-80, when there was a severe power shortage. It is thus obvious that installation of new capacity in the fertiliser industry will have to be either gas-based or coal-based.

The Government's preference seems to be moving in the direction of gas-based plants, evidently because of the confidence generated by the discoveries of gas in Bombay High, Bassein and other fields. Four large gas-based plants to produce nitrogenous fertilisers, two at Thal Vaishet in Maharashtra and two at Hejira in Gujarat, are already under way. The problem created by the non-availability of World Bank aid for Thal Vaishet is sought to be tackled through attempts to arrange export credit assistance from countries like Italy, France, Japan and Britain. For Hejira, a World Bank loan of $250 million is expected, although delay in its clearance is causing some worry. Half a dozen more fertiliser plants are planned to be set up in Rajasthan, Madhya Pradesh and Uttar Pradesh by bringing the Bombay High gas into the hinterland through a pipeline running from the west coast to Delhi.

Some fertiliser experts, however, question the wisdom of near-total dependance on gas-based plants for future fertiliser production expansion

UP's power crisis

UTTAR Pradesh experienced considerable hardship during the month of July on account of the sudden fall in the power supply in the State. The position became so bad that power supply to the rural areas as well as to arc furnaces had to be suspended. The immediate cause of the aggravation of the crisis was the closing down of two equipment in the Harduaganj power station due to flooding by rains. Although heavy rains were stated to be the cause of the power crisis in the beginning of July, water level in the hydel reservoirs, which account for 40 per cent of the installed capacity of power generation of the State, was stated to be lower this year during mid-July than it had been during the same period last year. Earlier in May this year thermal generation had gone down to almost as low as a quarter of the installed capacity. The poor quality of coal supplied to the power stations was stated to be the cause of the unusually low power generation at that time. This time also it is the fall in generation in the thermal plants that has affected power availability, which has never been quite satisfactory in Uttar Pradesh.

During 1980, the availability of power in Uttar Pradesh at 10,144 million kwh fell short of the requirement of 15,096 million kwh by nearly 33 per cent. It was a bad year for power in the State. Generation went down to 10,768 million kwh from 11,522 million kwh during 1979, despite a rise in installed capacity to 3,436 mw from 3,132 mw in 1979. During the first five months of 1981 the availability of power in Uttar Pradesh was 20 per cent less than the requirement. The situation during the first five months of this year was somewhat better than during the corresponding month last year when the shortage in the availability of power was almost 37 per cent. It has to be noted, however, that the requirement during January-May 1981 was estimated lower at 6,506 million kwh compared with 6,654 million kwh in January-May 1980. However, things took a turn for the worse from the end of June. The shortage of power has rendered idle as much as 80 per cent of the installed capacity of the mini steel plants in the State (total capacity over 5 lakh tonnes involving an investment of over Rs 50 crores). The very unsatisfactory rate of utilisation of capacity of the mini steel plants has landed them in a very serious financial crisis, a large portion of their capital having been eaten up. Thus at the State level, in Uttar Pradesh we have the same phenomenon of capital invested at great sacrifice to the people lying idle, aggravating the very problems of the people to solve which the investment had been made in fact. This vicious circle must be broken.

which amounts to a neglect of the possibilities on the coal side. Their contention is that though 15 million cubic metres of the daily total production of 20 million cubic metres of gas have been earmarked for the 10 gas plants, it is difficult to be certain that this level of production will continue to be available for another 20 years. On the other hand, coal is available plentifully in several parts of the country. The two coal-based fertiliser plants set up last year at Talcher and Ramagundam are proving the success of coal gassification technology.

In fact, indications of reserves of over 60,000 million tonnes in the Kalol region in Gujarat—which however, are at a great depth of 4,500 feet against the maximum depth of 2,000 feet reached so far in Indian coal-mining—have encouraged the suggestion that the possibilities of on-site coal gassification should be explored. However, although a technical team which has recently returned from Europe has painted an optimistic picture, the technology required would be rather sophisticated and is presently at the stage of experimentation even in the advanced countries.

Another point mentioned in favour of coal-based fertiliser plants is that they enable a greater degree of technological self-reliance. The Talcher and Ramagundam plants have been designed, engineered and built by Indian agencies and prime consultants after the process know-how had been bought from abroad. It is pointed out that in the building of these plants the cost of foreign engineering services was only 2.7 per cent.

Taking the pros and cons of both the sides there does seem to be a case for striking a better balance between gas and coal as feedstocks, which means that perhaps more attention ought to be paid to the possibilities of coal-based fertiliser technology.

In the meanwhile the Agriculture Ministry's latest four-month review of the overall fertiliser situation shows an improvement on all fronts. During February-May this year production of nitrogen went up by around 2.5 lakh tonnes compared to 6.52 lakh tonnes in the corresponding period of 1980. Production of phosphate also recorded a marked rise to 3.22 lakh tonnes compared with 2.99 lakh tonnes in the previous year. Arrangements regarding imports have also progressed apace. During February-May imports of fertilisers totalled 5.5 lakh tonnes compared with 4.15 lakh tonnes last year. Imports of phosphate amounted to 51,000 tonnes. Potash import was higher at 3.10 lakh

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RAJASTHAN

Dynamic administrator

JAIPUR

MR Shiv Charan Mathur (55) is Rajasthan's ninth Chief Minister having replaced the lacklustre Mr Jagannath Pahadia, who in his 13 months of rule could hardly do anything for the State's welfare. Mr Mathur, observers say, has now to salvage the State from the ruins left behind by Mr Pahadia.

Mr Pahadia, who was thrust upon from New Delhi in June 1980 to take over the Chief Ministership, was the choice of the late Mr Sanjay Gandhi. Of course, Mrs Gandhi also gave her blessings to Mr Pahadia who was then her Minister of State. In the Cong-I the choice of Mr Pahadia created a near furore but the voice of dissent could not be raised due to the support he enjoyed from Mrs Gandhi and Mr Sanjay Gandhi.

Mr Shiv Charan Mathur

Mr Pahadia just wasted his time in petty things. He would never take anybody into confidence as he suffered from many complexes besides carrying a fear always that everybody was after him. In June 1980 when Mr Pahadia landed here he was almost unknown to the people and he was in such a position that he could have built up good image for himself. Instead he relied on corrupt officers and outdated politicians.

The task ahead for Mr Mathur is no doubt gigantic and looking to his wide knowledge and eagerness to go into the problems he can deliver the goods. Mr Mathur, interestingly, was not inducted by Mr Pahadia into his cabinet.

Mr Mathur, who hails from the backward Bhilwara district, is an upright Cong-I leader who believes in doing things. He is a doer and observers note that if he is able to enlist the support and co-operation from all quarters he may do wonders.

In the past as a senior minister in the governments of Mr Mohanlal Sukhadia and Mr Harideo Joshi, Mr Mathur had done wonderfully well displaying keen desire to take up developmental schemes. He took lot of interest in dairy development in Rajasthan where the achievements are impressive.

Mr Mathur does not have any group of his own in the Cong-I and his election was largely due to Mrs Gandhi who picked up him as she knows that in the present circumstances it is only he who can deliver the goods.

Mr Pahadia was sacked as he failed to deliver the goods and seen in this context Mr Mathur will have to show results in the near future. He should rise to the occasion and take some bold and dynamic decisions which may stem the rot created by his predecessor.

He has begun well by taking talent into his ministry. Mr Chandanmal Baid, who has been given the vital portfolio of Finance, is known for his wide knowledge in dealing with the difficult financial problems. In the past he had done wonders as Finance Minister turning the huge deficit into surplus.

Mr Parasram Maderna, who has been given the Departments of Power (Energy), Irrigation and Revenue, is a strong man capable of taking bold decisions.

tonnes compared with 2.36 lakh tonnes in the previous year. As a result of improvement in indigenous production and import arrangements, the supply of fertlisers during February-May also increased to 15.4 lakh tonnes from 12.89 lakh tonnes in the corresponding period of 1980.

In a bid to broadbase the fertiliser supply and distribution system down to the block level, the Government has initiated a number of measures. The basic feature of the new supply policy is that fertilisers will be supplied to every block headquarter in the states instead of the nearest railhead point of a district, as at present. This will ensure timely availability of this critical input at the right point of consumption. However, the success of this innovation will depend on the availability of micro-level data as well as the capacity to take fertilisers right into the interior by road.

Money

Who bears burden of inflation ?

DURING the thirty years between 1950-81, the absolute volume of real goods and services has gone up by 200 per cent, as measured by real rise in national income. Despite this growth consumer prices have risen by 400 per cent and wholesale prices by 440 per cent because population has risen by 63 per cent in this period, and gross national expenditure, as measured by money supply, has risen by 2,000 per cent and gross monetary resources in total have risen by 3,500 per cent.

Put it in annual terms. The real national income has risen at the rate of 3.5 per cent per annum, population two per cent per annum, money supply at 10 per cent per annum and monetary resources at 11.5 per cent per annum during the last thirty years, resulting in an average growth of prices at 5.5 per cent per annum.

Is this tolerable for the individual ? Companies, corporations and governments may be able to tolerate these trends but for individuals, these trends are going beyond tolerance limits. How ?

Prices are likely to rise between 14 to 18 per cent in the current year 1981-82. If these trends are projected throughout the eighties, in the next ten years, we may have an annual real rise of 15 per cent in prices, because the rise in real national income will be three per cent per annum, population will again be two per cent per annum, and gross national expenditure will be 20 per cent per annum. What is the meaning of 15 per cent per annum growth in prices during the next ten years ? Let us see what happens if the rupee is assumed worth 100 paise today (although it is already worth 20 paise compared to 1951 !) (see Table).

Obviously, this is not tolerable, because you can't make plans for anything worthwhile on the basis of inflation rate of this magnitude. It took us thirty years to bring down the rupee to 25 paise : now we can do it again in ten years !

Impact of inflation at an annual rate of 15 per cent.

Year	Worth of Re I paise	Cost of goods and services Rs paise
1981	100	1 . 00
1982	87	1 . 15
1983	76	1 . 32
1984	65	1 . 52
1985	57	1 . 75
1986	50	2 . 01
1987	43	2 . 31
1988	38	2 . 66
1989	33	3 . 06
1990	28	3 . 52

Yet businessmen make plans for future precisely in this environment, without providing for this rate of inflation. It is because they know what the banks and financial institutions do not know. Once they commit banks and financial institutions the costs of delays, overruns and of inflation can be forcibly pushed on to them — whether they like it or not. Although, all financial institutions provide that the cost of overrun will be borne by the borrowers, they just can't help it.

Whatever be the stipulations, whatever be the legal situation, when a deadlock is reached, borrowers are able to exert pressure on the institutions to relax, and to provide finance for the cost of overruns and delays in one form or another. Maybe sometimes overruns and delays masquerade as expansion, modernisation, balancing equipment and so on. But all the burdens eventually fall on the institutions, diluting promoters' share, increasing debt-equity ratio and lowering debt servicing capacity of the plant.

This whole game of investment in face of an inflationary psychology is like a country where nobody speaks the truth. None of the voluminous data that entrepreneurs submit to the institutions speaks the truth and what is more pernicious, the institutions do not have the time or the inclination to find out the truth.

S. G. Shah

COMPUTERS

Controversy over import

From ARVIND BHANDARI

NEW DELHI

A CONTROVERSY has arisen in regard to the supply of 140 computers to the Union Government against what is going to be the biggest single order for computers ever placed in India. Should these computers, estimated to cost about Rs 5 crores, be supplied by indigenous or foreign manufacturers?

The Union Education Ministry has launched an ambitious programme to equip all universities, regional colleges and technical institutes (other than IITs) with computers. These computers will function as teaching aids and meet the computation requirements of various faculties. The tendering for procurement of the computers has been entrusted to the Department of Electronics (DOE) and the entire purchase is to be completed over the next two years.

Industry sources complain that DOE has drawn up the specifications for the tender in such a manner that it precludes the possibility of indigenous manufacturers meeting the requirements. They claim that the Indian computer industry has a manufacturing ability which exceeds the requirements of students in engineering colleges and universities. While imports of large computer systems for critical areas

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like defence and space research are understandable, computer requirements in other fields should be left to be met by the indigenous industry so that it may get a chance to develop further. Moreover, students trained on imported computers acquire an expertise which may not be always useful for Indian organisations. Further, the process of imports, once started, is difficult to end because systems need to be frequently updated.

The Indian manufacturers say that as it is they face an uphill task because of the high cost of imported peripherals needed in the manufacture of indigenous systems. They were looking forward to the massive Education Ministry order as an opportunity to step up their indigenisation programme. They also wonder whether DOE has taken care to ensure the availability of the sort of infrastructural facilities that would be required in the event of computers being acquired in accordance with the specifications drawn up by it. As regards the comparative cheapness of imported computers, it is contended that the foreign companies may supply the computers at a low price and then make their margins subsequently in the supply of spares.

Sources in the Department of Electronics deny that there is any deliberate intention to deprive the indigenous industry of an opportunity to partake of the computers order. If they could compete successfully with the foreign companies, the orders would go to them. The main yardstick is quality and standards. While the interests of the indigenous industry are no doubt important, quality and standards cannot be compromised. As it is, India is suffering from technological obsolescence.

Neither is it correct to say that the specifications have been artificially jacked up. In fact, the specifications were drawn up not by DOE but by an independent committee of experts which included representatives of educational institutions, who would be the users. The problem is that the Indian manufacturers have been, because of the commercial angle, concentrating on manufacture of computers for processing business data and have neglected development of computers for processing scientific and technological data. Now that they are not able to come up to the requisite standards, they are making a hue and cry. Moreover, they have had a broad idea for quite some time now about the nature of the specifications for the sort of computers that would be required in the field of education.

As I see it

Locational concentration and inflation

ONE of the factors that has accentuated the phenomenon of urbanisation without proportionate development of industrialisation is no doubt the practice, so assiduously followed in the face of the declared and repeatedly reiterated national policy of balanced regional economic investment and development, of locational concentration of industries in particular geographical areas. Denied any opportunity of securing gainful employment near their homes (since development takes place in areas far away) persons are compelled to travel long distances to unknown places in search of gainful employment of some sort, contributing to the worsening of the already unsatisfactory housing condition and promoting the growth of substandard living in urban areas like Bombay and the other major cities. For no area, however, economically and industrially developed, can ever hope to accommodate the job-needing population of even one state, not to talk of that of the entire country.

The locational concentration has created an excessive pressure on the country's transport system which, in turn, has exacerbated the inflationary pressure. The gradual deterioration over the past decade is seen from the fact that while in 1969-70, the first year of the Fourth Five Year Plan, the average lead of traffic hauled over the Indian railway system at 617 km was well below the assumed lead of 630 km for the Plan, by the end of the Plan period in 1973-74, the average lead went up to 662 km. In the Fifth Plan the position became much worse. Against an assumed lead of 678 km for the Fifth Plan, the actual average lead in the very first year (1974-75) of the Plan was 686 km. By the end of the Fifth Plan in 1978-79 the average lead went up further to 693 km. In 1979-80 it was 717 km — 100 km longer than it was ten years earlier.

In other words, over the period of ten years the railways were called upon to cover an additional average distance of 100 km per wagon, which had the effect of reducing the availability of wagons. The other effect was higher transport costs and consequently higher market prices of commodities. For example, during 1979-80 the average lead of cement transport by the railways increased to 759 km from 645 km assumed in the Fifth Five Year Plan. The figures for fertilisers were 1,081 km against 750 km, for foodgrains 1,253 km against 1,050 km and other commodities 691 km against 800 km. While in 1976 the number of wagons loaded with cement was 99 per cent of the requirement of the industry, it fell to just 64.5 per cent in 1979. This led the Cement Controller and the Railway Board to agree that from July 1, 1978 all movement of cement from factories up to a distance of 250 km for all categories of consignees would be by road only. The extra expenditure on road haulage was agreed to be added to the sale price of cement. Similarly during 1978-79 for want of covered wagons imported fertilisers were agreed to be moved by road up to 500 km and indigenous fertilisers up to 1,000 km by subsidising the additional cost on road haulage.

While on the one hand subsidy was being paid from the public exchequer on road transport of fertilisers, the railway revenues suffered because of a fall in the quantity of fertilisers and cement hauled by the railways. This provided the ground for raising the freight and passenger fares to augment railway revenues and, in the process, fuelling the inflationary rise in prices of not only cement and coal but also of many other commodities and services. To fight inflation effectively thus requires, among other measures, a more balanced economic growth in the various regions of the country.

Subhash Chandra Sarker

Another important aspect is cost. Indian computers, which in any case are not wholly indigenous because of the imported peripherals, are costlier. DOE sees no reason why the Government should spend more money than is necessary.

The first Indian-designed computer system *ISIJU*, was developed by the Indian Statistical Institute, Calcutta, and Jadavpur University in early sixties. Later the Tata Institute of Fundamental Research, Bombay, developed a computer known as TIFRAC. Though these were valve models, it is felt that with proper encouragement the indigenous industry could have built up by now a large pool of talent in computer hardware.

Petrodollars for tourist hotels

From O. N. KOUL

SRINAGAR

IN the creation of tourism infrastructure, required to cater to a targeted inflow of 1.75 million by 1985, Arabs are obviously the most-favoured investors for the Government of India.

This is clear from the fact that the Union Government has decided to allow 40 per cent equity participation to investors from petrodollar countries against only 30 per cent for others. Another favoured treatment for the Arabs is that they can advance 100 per cent loan to Indian counterparts against a maximum of 50 per cent permitted for investors from other countries. So far, participation of foreign investors in general was limited to equity participation which too was restricted at 20 per cent.

Apparently, the Government of India expects bulk of the tourism infrastructure to come up in the private sector which has been offered tax concessions and assured availability of institutional finance. This is clear from the fact that of about Rs 400 crores expected to be invested in this sector during the Sixth Plan, Rs 200 crores are expected to be contributed by the private sector. As for the Governmental investment in the tourism sector as a whole, the allocation with the Centre is Rs 72 crores and Rs 125 crores are with the state governments.

The Union Minister for Tourism, Mr A. P. Sharma, who was here recently in connection with the two-day meeting of the parliamentary consultative committee, did not elaborate on the nature of private sector participation in the "coordinated approach for tourism development, evolved for the first time, based on pooling the resources of the Centre, states and the private sector". It, however, seems that while the Union and the state governments will together implement the "travel circuit" scheme with or without the changes proposed by Members of Parliament from all the states, the private sector will confine itself to the construction of luxury hotels. According to Mr Sharma, India requires 40,000 hotel rooms for a tourist inflow of 1.75 million by 1985. The present availability is 22,000 hotel rooms and another 9,200 rooms are under construction. He, however, did not rule out the participation of public sector in creating the balance accommodation for the tourists.

As is known, the Union Tourism Ministry, in association with the states and the Union territories, identified and finalised 59 travel circuits, comprising 427 travel centres, for intensive tourism development. Also planned are "Destination South India" and "Destination East India" programmes. As a result of the "Operation Australia", the Central Government decided to continue Air India's services to that country and is seeking "a more viable air fare from Australia to India". An office is proposed to be opened in Malaysia as substantial tourist traffic was generated recently from there to India. The Central Government hopes to record an overall growth rate of 19.4 per cent in the overall traffic from the South-East Asia region.

In 1980, India received eight lakh tourists, of whom over one lakh came from Britain and 78,000 from the United States. A target of 1.2 lakh tourists has been fixed this year for the UK. This is besides the target of 2.5 lakh tourists fixed for the European region. An increase of 15 per cent in tourist traffic is planned from these areas during the current year. This will be a considerable advance, if achieved, in the light of the fact that with 3,42,370 arrivals during January-May last, the country witnessed an increase of 10.2 per cent in the inflow of international tourists over the corresponding period last year. By itself, this has been termed as an "encouraging trend" by Mr Sharma towards the achievement of targets. Foreign exchange earning from international tourism is expected to double to Rs 1,000 crores by the end of the Sixth Plan from Rs 500 crores at present.

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on July 24, 1981 over		
		July 24, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.50	3.50	3.50	2.80	—	—	25.0
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.20	2.20	2.20	2.00	—	—	10.0
Bajra	Average	2.20	2.20	2.20	2.00	—	—	10.0
Gram dal	Average	6.20	6.20	6.20	6.00	—	—	3.3
Tur dal	Average	6.50	6.50	6.50	5.50	—	—	18.2
Potatoes	Average	2.00	2.00	2.30	2.60	—	—13.0	—23.1
Onions	Average	1.50	1.60	1.30	1.00	—6.3	15.4	50.0
Milk per litre	Buffalo	5.00	6.00	5.60	4.25	—16.7	—10 7	17 6
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre	—	1.66	1.66	1.51	1.39	—	9.9	19.4
Bread (400 grams)	—	1.55	1.55	1.55	1.25	—	—	24.0
Sugar	Average	6.50	6.50	7.00	7.85	—	—7.1	—17.2
Gur	Average	6.00	6.00	6.00	6.00	—	—	—
Groundnut oil	Average	15.00	15.00	14.00	11.50	—	7.1	30.4
Vanaspati	Average	16.00	16.00	15.00	—	—	6.7	—
Toilet soap	—	1.95	1.95	1.90	1.90	—	2.6	2.6
Exercise book (200 pages)	—	2.50	2.50	2.50	—	—	—	—

Advances in tribology

DURGAPUR

IN the field of tribology, during the recent years, the Central Mechanical Engineering Research Institute (CMERI), Durgapur, along with its Merado Centre at Poona, has made considerable progress in the direction of wear, friction characteristic, uses of solid lubricant and high speed gas bearing, according to Dr S. K. Basu, director of the institute. Dr Basu, who heads the institute since 1976, has specialised in the field of machine tools, tribology, production management and operations research.

Various forms of plastics nowadays available in our country are finding increasing uses in the machine tools industries, defence and chemical industries etc. Tribological properties, particularly behaviour of friction and wear rate of pure and impregnated plastics like tefflon, nylon etc, have been studied under conditions of varying contact pressure on the meeting surface, different velocities of sliding and under various types and modes of lubrication including dry, boundary, and hydrostatic conditions. Work on the optimisation of design parameters, in regard to permissible pressure on the slide in the machine tool, appropriate velocity of traverse and proper lubrication, has already resulted in effective and economic use of different guide materials under different environmental conditions with particular reference to their applications in special purpose machine.

Use of solid lubricant in machine tool industry is one of the advanced technique nowadays. Merado, Poona under *CMERI* has done considerable amount of work on the selection of cutting fluids based on solid lubricants under different machining conditions. Molybdenum disulphide and graphite based lubricants were studied in evaluating their specific uses in different machining operations. At *CMERI*, Durgapur, at present work was being done to establish optimum values of essential parameters while using solid lubricants in metal forming operation such as extrusion.

An improved computational procedure for predicting flow field in an extrusion process has been developed. The capabilities of the technique have been demonstrated by predicting an experimental situation. More information about the distributions of stresses and strains could be obtained with little difficulty by using procedure developed as the calculations involved were inherent in the technique itself.

The tool life is a very important aspect of economic machining of metals. Arresting of tool wear is very much desired in any operation evaluaing performance in metal machining. Studies have been made to evaluate "thermoelectric wear" of carbide tools on a lathe machine. In this connection, the machine resistance in "Machine-Tool-Workpiece-Machine" system has also been measured. Minimisation of thermoelectric wear of the tool using compensating devices, such as (i) sending current equivalent to the magnitude of thermocurrent in the opposite direction and (ii) by insulating the tool with an isolator has been successfully effected. Machinability *i.e.* ease of machining a material, is very important in production engineering. The rating machinability of different materials are done by various methods.

Recently work has also been done in the field of surface topography—its stationarity and ergodicity based on various machining operation. Theoretical analysis has been done for finding out the plastics deformation of the asperities and their effect on contact compliance.

In view of the need and urgency of developing special purpose bearings for machine tool, high temperature and nuclear applications, as well as in cryogenic, a project on air bearing has also been initiated. Performance test of air bearings at a speed up to 30,000 rpm has been conducted in the laboratory with indigeneously developed air bearing supported radial air turbine serving as a drive unit. Various aspects of rotor techniques such as stiffness, damping and stability characteristics of externally pressurised air bearings have been investigated theoretically and experimental results compared favourably with the theoretical predictions. The Institute has also set up with variable speed and variable size journal bearing testing machine developed indigeneously with proper instrumentation to measure friction temperature and oil film, thickness in various conditions. The machine could be utilised to exactly simulate the tribo-system for industrial problems as well as to do the basic research under boundary, mixed film and full film lubrication zone.

The Institute has a plan to set up a laboratory so that it could cater mainly to the industrial needs of the country as well as fill up a long gap in application of tribological researches to industrial product design, maintenance and upkeep.

Rubber plantations in Konkan

KOTTAYAM

THE Rubber Research Institute of India has decided to take up trial plantation of rubber in the Konkan region of Maharashtra State. An area of 50 hectares belonging to the Dairy Project at Dapchari has been taken over for this. The land, allotted to the Rubber Board by Government of Maharashtra, is situated 150 km away from Bombay on the Bombay-Ahmedabad highway near Kurze dam at Dapchari Village. The proposed rubber plantations will be the Research-cum-Demonstration Centre exclusively for this region. The centre will study the specific problems relating to the agro-ecological conditions pertaining to the non-traditional tracts and will also assess the scope for large scale commercial cultivation of the para rubber trees (*Hevea brasiliencies*) which almost exclusively supply the world with natural rubber.

Mr P. Mukundan Menon, rubber production commissioner of the Rubber Board, Mr V. K. Bhaskaran Nair, director of research, Dr S. Narayanan Potti, deputy director, agronomy, and Mr P. J. George, botanist of the Institute, recently visited the area set apart for the centre along with the officials of Maharashtra Government. As the area selected for the centre gets only about four months rain, the period of drought is much prolonged which is not conducive for rubber cultivation. The centre will, therefore, try irrigation methods and the authorities of the Dairy Project Dapchari have offered all the facilities and co-operation to the Rubber Board. The Research Institute proposes to initiate steps to establish this centre immediately.

Viability of regional rural banks

Bombay

DESPITE the constraint of limited area of operation, an unhelpful topography and an unenterprising clientele, the regional rural banks (RRBs) have so far been able to achieve the main objective of helping the weaker sections of the community in the rural areas, namely, small and marginal farmers, landless agricultural labourers and rural artisans, by purveying credit to suit their requirements. This conclusion emerges from a study on the viability of RRBs undertaken by the Rural Planning and Credit Cell of the Reserve Bank of India. The study covers the working of 15 RRBs which had been in existence for three years, or which had attained a loan business of Rs 3 crores and above by the end of December 1978.

On an average, an RRB had (by the end of 1978) advanced directly a total loan of Rs 3.35 crores to about 42,000 borrowers at the rate of about Rs 800 per account, indicating thereby the preponderance of small borrowers. Out of the total borrowers, small/marginal farmers and landless agricultural labourers accounted for 70 per cent and rural artisans, retail traders and other unemployed persons for 25 per cent.

The 15 RRBs selected for the study had controlled their operating expenses quite efficiently. There was no doubt a rise in expenditure between 1976 and 1978, but this was due to increase in interest paid on deposits (from 6.7 per cent to 32.2 per cent) and interest on borrowings (from 20.0 per cent to 22.6 per cent) and not due to increase in establishment expenses. Actually, establishment expenses had declined from 73.3 per cent in 1976 to 45.2 per cent in 1978. The overall rate of growth in income was quite impressive. The gross income per RRB increased from barely Rs 3 lakhs in 1976 to Rs 40 lakhs in 1978.

The gap between income and expenditure of RRBs is quite small signifying that the RRBs are nearing the break-even point. With a view to ensuring that they now start building up reserves, they should aim at sufficiently high growth rate for their loan business. On an average, an RRB would require about six years and a network of 70 branches to become viable. For this it is necessary that it reaches an outstanding loan business of Rs 8 crores and also enjoys a margin of about 5 per cent as between its average borrowing and lending rates. It is not possible for all the branches to become viable, because some branches are located in centres where the potential is limited, while some branches cannot expand their business in view of keen competition from the branches of commercial and co-operative banks.

Although the RBI undertook the study to examine the financial viability of RRBs which had completed three years of operation and reached a loan business of Rs 3 crores, it points out that a three-year period is generally not sufficient for a credit institution to achieve viability particularly for a rural credit institution and more so for RRBs. For the RRBs have been operating with some serious constraints—lending only to weaker sections, charging lower rate of interest, opening branches in the remote rural areas and keeping up low-cost profile—as a result of which they do not have adequate staff required for project preparation to avail of refinance from the Agricultural Refinance and Development Corporation. The RRBs also suffer from a number of teething troubles including staff orientation for rural lending work. A reasonable period for reaching financial viability may have to be longer in the case of RRBs than for other banks, RBI study says.

Even after allowing for the above limitations, the findings of the study indicate that the performance of RRBs is encouraging.

Bombay spot exchange rates of currencies as on 27-7-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.60	9.80
Austria	A. Schilling	188.00	194.00
Belgium	B. Franc	442	450
Canada	C. $	13.37	13.83
Denmark	D. Kroner	84.90	86.20
France	Franc	64.40	65 50
Hong Kong	H.K. $	62.80	64.80
Italy	Lira	13,500	13,660
Japan	Yen	2580	2630
Malaysia	M. $	25 90	26.80
Netherlands	Guilder	30.00	30.50
Norway	N. Kroner	67.90	69.00
Singapore	S. $	23.70	24.40
Sweden	S. Kronor	57.70	58.70
Switzerland	S. Franc	23.20	23 70
UK	£	5.9780	6.0290
USA	$	11.12	11.32
West Germany	D.M.	26.90	27.40

Performance of financial and investment companies

Meanwhile, another study by RBI reveals that the working of 299 selected non-government, financial and investment companies other than banking and insurance companies (each having a paid-up capital of Rs 5 lakhs or above) showed an increase of 8.2 per cent in total income (to Rs 37.71 crores) for the year 1978-79 as compared with the previous year's income (Rs 34.86 crores). The increase in the income of investment holding companies from Rs 13.24 crores to Rs 15.89 crores during the year under review was noteworthy.

Out of the four groups of companies, investment holding companies and hire purchase finance companies recorded growth rates of 6.7 per cent and 7.2 per cent in the main income, respectively, during 1978-79, while trading in share companies and loan finance companies registered a decline of 7.2 per cent and 2.3 per cent, respectively. Total expenditure increased from Rs 18.07 crores in 1977-78 to Rs 19.08 crores in 1978-79, showing a rise of 5.6 per cent. This was due to a rise of 8.0 per cent in the 'remuneration to staff' and 13.6 per cent in 'other expenses'.

The year 1978-79 witnessed an increase of Rs 90 lakhs in operating profits whereas non-operating surplus increased by Rs 95 lakhs and retained profits increased by Rs 111 lakhs.

While the rate of return (as measured by the ratio of operating profits to total net assets) improved marginally from 5.6 per cent in 1977-78 to 5.7 per cent in 1978-79, the return on shareholders' equity (as measured by the ratio of profits after tax to net worth) improved from 7.3 per cent to 7.8 per cent. Out of the 299 financial and investment companies, 235 earned operating profits during 1978-79 as against 234 companies in the previous year.

The total net assets of the selected companies increased from Rs 262.04 crores in 1977-78 to Rs 276.22 crores in 1978-79. The share of owned funds on the liabilities side remained more or less steady at 56 per cent, while the share of borrowings declined from 31.0 per cent to 30.4 per cent.

The reliance of selected companies on external sources of finance (50.9 per cent) was marginally higher than on the internal sources of finance (49.1 per cent). Reserves and surplus were the main constituents of the internal sources. Whereas hire purchase finance companies relied heavily on external sources of finance, investment holding companies depended mainly on their internal sources.

ELECTRIC MOTORS

Need for standardised stampings

BOMBAY

THERE has been no respite to the electric motor industry from problems of raw materials, fiscal levies and so on and these appear to be compounding year by year if the presidential speech of Mr Vijay Bhangar at the 16th annual general meeting of the All India Electric Motor Manufacturers Association is any indication. He says, that full requirements of stampings from suppliers are rarely available and though the stamping manufacturers have been receptive to the problems of the electric motor units, especially those who are members of the association, he would like them to give priority to production of small scale stamping used by small and tiny sector units. At the same time stampings should be standardised and varieties of stampings reduced so as to bring about increased production of standard stampings.

Mr Bhangar has also decried different interpretations given to excise notifications by different collectorates. He points out that though electric motors are exempted from whole of excise duty up to Rs 7.5 lakhs if clearances during the year do not exceed Rs 30 lakhs, the excise collectorate in Kolhapur insists upon demanding excise duty on stators and rotors forming component parts of electric motors. Unless the Government rectifies such unreasonable interpretation, the concerned manufacturers would stand to lose heavily. Another lacuna pointed out by Mr Bhangar relates to the sales tax in Maharashtra. With the recent amendment to the act, the electric motor industry, instead of getting relief, finds it has to pay a higher sales tax of 8 per cent as against 2 per cent—almost 400 per cent increase—simply because electric motors used in agriculture have been shifted from Section C-I-12 to Section C-II-102. It is surprising that while the Government has been subsidising the farmers for inputs like fertilisers in order to keep agricultural costs below, it has chosen to make them pay more for their electric motors. It almost amounts to giving the farmer with one hand and taking away from him with another, Mr Bhangar says.

BUSINESS OPINION

JRD on Steel Development Fund

MR J. R. D. Tata, chairman, The Tata Iron and Steel Company Ltd : "The method by which from April 1979 the Government compensated the main producers for increases in costs of controlled categories of steel by payments from the Steel Development Fund (SDF) based on each plant's own cost escalations caused us much concern, for it infringed the principle of price uniformity within the industry which had been accepted without interruption for decades. Such a system is unfair to those who, at considerable expense of money, effort and ingenuity, manage to keep their cost increases to the minimum, while it removes all incentive for further effort in that most desirable direction…

"At the date of this report, the situation in regard to the Steel Development Fund is still not clear. As shareholders are aware, the Government had announced on the 9th of February this year, an increase of 20 per cent in the prices of all price-controlled categories of steel to be paid in toto into the Fund. However, subsequent to the decontrol of billets, bars and rods on 24th February, the Government decided in June 1981 that the scheme of contributions to the Fund as per the February announcement would apply only up to March 31. Notwithstanding unconfirmed press reports, decisions whether the SDF is henceforth to be used exclusively for financing modernisation or also for the payment of compensation for cost increases, and as to the amount of contributions to the Fund and the categories on which they are to be made from April 1, 1981, are still to be announced.

"I hope that in formulating the final scheme of things, the SDF will be reserved exclusively for financing modernisation and consequential minor expansion, and not for meeting cost escalations. In regard to the latter, so far as decontrolled categories of steel are concerned, the producers should normally look to market forces and their own efficiency and cost competitiveness. If the Government were at any time satisfied that imports of steel were taking place at uneconomically low prices amounting to dumping, they should, as in the past, resort temporarily to protective import duties. In the case of those categories of steel which continue to be price controlled in the public interest, the Government should increase such controlled prices from time to time to meet legitimate and unavoidable increases in costs. Such increases should be approved after only summary investigations of costs to avoid the long delays, costly to the producers, which invariably took place in the past.

"An issue of particular importance to the integrated plants, including ours, concerns the terms on which loans are to be made from the SDF against approved modernisation programmes. We have represented to the Government that, as the accretions to the Fund will come from the amounts collected by the main producers, they should be lent back to them at a concessional rate of interest and not as announced at the rate charged by the financial institutions for commercial loans. As the Company's argument has not been accepted up to now, a further representation has been made urging reconsideration on the additional grounds, amongst others, that the funds to be lent will have cost the Government nothing to raise and that the higher rate of interest will increase the cost of modernisation, by about 15 per cent even after allowing for tax relief.

"We have also urged that even though it may not be specially laid down in the SDF scheme, the amount loaned to each plant over the years should in practice bear a reasonable relation to the amount it had contributed to the Fund. Finally, we have also asked that the integrated steel producers should be represented on the Committee administering the Fund, or, if that is not possible, that at least the views of the main producers should be taken into account in its administration and in the grant of loans."

British Asians demand full citizenship rights in the UK

From PAVAN SHARMA

NAIROBI

MR Romesh Desai, chairman of the Hindu Council of Kenya, who had been sent to the UK to express concern over the nationality bill, has released the following summary of a 36-page memorandum submitted to British parliamentarians on behalf of the British subjects living in Kenya. He was accompanied by Mrs Kusum Shah, Secretary of the council, during this trip, The summary reads as follows :

Since the British Nationality Act of 1948, various immigration/nationality laws or amendments thereto have been passed, gradually curtailing the rights of British subjects—citizens of UK and colonies, living outside Britain.

The current Nationality Bill amounts to paper genocide of these people who through no fault of theirs, stand to lose all their rights if the bill in its original form becomes law. The proposed Nationality Bill provides for three categories of citizenship:

I. *British citizens* : Those who or whose parents were born, adopted, naturalised or registered in the UK. In addition, it will also include those British subjects who have been residing in Britain, free of conditions, for a period of five years.

II. *Citizens of British dependant territories* : This category will include people who are citizens of the UK and colonies by reason of their parents' or their grandparents' birth, naturalisation or registration in an existing British, dependency or associated state.

III. *British overseas citizens* : The people falling in this category are mainly those who were born in countries which were then part of the British Empire or who had resided in such countries for a long period; thus their British citizenship was derived by virtue of their birth or registration in former British colonies or dependencies.

The British overseas citizens (BOC) will not be able to transmit their children. They will have BOC passports issued to them and would be entitled to British consular protection. They cannot enter Britain or an existing British dependency to settle.

As regards this third category of BOC we wish to submit as follows :

1. Suddenly and abruptly "depriving" these British subjects of their citizenship as secured under the 1948 Nationality Act who have no other citizenship and no country—to go to, would be unjust and unfair. They retained their British citizenship when they had an option to choose another, in the hope and in the best of faith that Britain will look after them. Therefore all British subjects from former colonies and dependencies should be included in the new classification of 'British citizens' as provided for in the Bill.

2. Furthermore, there should be a written assurance by the government that there would be a settlement voucher available for all the people falling in this category who are presently residing outside Britain and issued to them whenever needed. A majority of all those concerned are either professionals or highly skilled British citizens employed outside UK. These people should be reassured and be given right of entry into the UK when applied for, over the counter. They could then come gradually, at their convenience to the UK and be absorbed into UK's mainstream.

3. The total number in Kenya of people eligible for vouchers is estimated in the region of 17,000. But we feel that this is grossly exaggerated. We suggest a census be conducted by the British High Commission in Nairobi to establish a near-accurate figure which in our opinion would not exceed 10,000. There may not be more than 2,500 heads of household eligible for a voucher for settlement.

4. Those British subjects who are eligible for settlement in the UK would not come here all at one time but would come when it is convenient for them to do so, that is, when their work permits or trading licences have expired, and they are placed in a position whereby they can no longer earn a living in their country of adoption, they would bring their savings and other finances which they are permitted to bring. They should be allowed to a voucher over the counter by the British High Commission in Nairobi.

If on the other hand, they were made to wait in a queue, they would be forced to use up their available financial savings and resources and finally they would enter the country penniless and with a lot of mental stress; people entering in such a state would naturally ask for and expect monetary assistance from the government's welfare scheme. Apart from the drain on public funds, such a state of affairs, would not be conducive to good community relations.

5. The non-white British subjects who originally came to East Africa did so at the instance of and at the invitation of then ruling authorities in Britain, to work for them. These people then gave loyal services to the British Empire by laying the railway lines and by working in the banks, finance houses, government offices, railways, insurance companies, professional companies etc. They helped in the development of these former colonies by opening up shops, boarding houses etc. In the lonely and absolutely undeveloped hinterland. The loyal and faithful service rendered to the British Empire by the pioneers of the present generation has never been given due recognition. These British subjects (born or registered as citizens of UK and colonies), when given the choice of the citizenship of their adopted country or the UK, opted for the British citizenship. As such, these people hold no other citizenship and have nowhere to go. This act alone speak for the loyalty of such people to Britain.

Successive British governments, while giving verbal assurances, have curtailed their rights. Britain should once and for all recognise its responsibility to and honour obligations to all those British subjects holding citizenship of the UK and colonies whether in Kenya, India, or Zambia and give them full citizenship rights.

6. At present there is no right of appeal under the voucher system against refusal of a voucher to the head of household or an entry certificate to his dependant. This should be introduced so that if the applicant feels he has been unjustly refused an entry certificate for settlement, he may be in a position to appeal and be heard by a judicial forum.

7. In the proposed law a lot of discretion has been vested in the Secretary of State which in effect and for practical purposes means that civil servants have been given a lot of arbitrary powers and they have the final say. We strongly feel that these powers should be curtailed and also that appeals be allowed against decisions of refusals to issue passports entry certificates, etc. A set system for issuing of entry certificates and passports should be devised setting out all requirements. The applicant on refusal should be given reasons for such refusal if he wishes to know them.

8. 'Close links' or 'close ties' with

the UK is a very debatable and arguable phrase. Those people who are settled in Australia, Canada etc have a connection, to the extent that their ancestors were born here. These people may have no relatives at all in Britain and no other ties whatsoever. They may not wish to ever come to Britain or to reclaim their British Nationality. On the other hand, most of the British subjects residing in East Africa (of Asiatic stock) have relatives settled here. They are loyal to the country. Their thinking and style of living is geared to that prevailing in Britain. We feel that people in the latter category have stronger ties or links with the UK than of those in the earlier category who have no connections with this country whatsoever.

9. Section 65 (3)/(2) of British Nationality Act 1948, provides for 'deprivation' or citizenship from people whose conduct is damaging to the security of the country or is not conducive to public good. The behaviour or conduct of British subjects living in East Africa has not been such as to justify deprivation of their previously conferred and confirmed rights; there is no justification at all for usurping their rights from the people concerned.

10. We feel that the new act should contain the civic rights of people who have already settled here and of those who will in future be settled here; the rights, duties, responsibilities and obligations conferred by the state upon the citizens as well as what and how much the state anticipates or expects from them must be clearly spelled out.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on July 20, 1981)

	High	Low	T.T
Australian $	6 53	6.45	6.614
Belgium Franc (100)	14 20	13.00	14 47
British £	10.85	10 55	10.71
Burmese Kyat (100)	25.00	15.00	
Canadian $	4 75	4.68	4.786
French N.F.	0 995	0.96	0.998
Indian Rupee (100)	57 00	52.00	64 85
West German DM	2 36	2.31	2 365
Indonesian Rupiah (100)	0.88	0.78	
Italian Lira (100)	4 90	4.50	
Japanese Yen (100)	2.475	2.435	2.485
Korean Won (100)	0.87	0 77	
Malaysian $	2.44	2 40	2.4555
Netherlands Guilder	2.12	2.08	2.1255
New Zealand $	4.85	4.65	4.8535
Pakistan Rupee (100)	4 30	3.80	5 915
Philippine Peso	0.69	0.67	0/7335
Singapore $	2.65	2.61	2.6755
South African Rand	5.40	5.00	6 2905
Sri Lanka Rs (100)	30.00	22.00	
Swiss Franc	2.75	2.69	2.7565
Taiwan $ (100)	14.60	14.30	
Thai Baht (100)	27.00	24 00	

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71 = 100)

	During the week ended				Percentage variation			
	July 4 1981	June 27 1981	June 6 1981	July 5 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	273.7	274.9	273.6	255.1	—1.4	—	7.3	35.5
Primary articles	261.8	259.4	256.0	231 8	0.9	2.3	12.9	27.2
Fuel, power, lubricants etc.	400.5	400.5	400.3	353.1	—	—	13.4	57.1
All commodities	279.5	279.1	277.0	253 7	0.1	0.9	10.2	33.3

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	July 10 1981	July 3 1981	June 12 1981	July 11 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,285	58,060	57,593	49,205	0 4	1.2	18.5	37.5
Bank credit	26,598	26,556	26,132	22,405	0 2	1.8	18.7	36.1
Aggregate deposits ..	40,402	40,169	39,391	33,305	0 6	2 6	21.3	42.2
Foreign exchange reserves(a)	4,877	4,877	4,923	5,244	—	—0.9	—7.0	—15.2

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	May. 1981	144 6 (a)	146.5 (a)	—1.4	10 5
Exports	Rs. crores	April 1981	592	02	17.9	—2 6
Imports	Rs crores	April 1981	968	895	8.2	3.0
Trade balance	Rs crores	April 1981	—376	—393	—	—
Foreign exchange reserves (a)	Rs crores	June 1981	4,879	5,047	—3.3	—6.8
Wholesale price Index ..	1970-71 = 100	June 1981	278.3	276.1	0 8	14.7
Consumer price Index for Industrial workers ..	1960=100	May 1981	433	427	1.4	13.6
Unemployment(d) ..		May 1980	149	148	0.7	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,670	6,459	2,523	3.3	14.9
Imports	Rs crores	12,106	8,908	2,955	35.9	22.3
Trade balance	Rs crores	—5,436	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b) .*	Rs crores	55,229	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71 = 100	255.6	217.1	139.7	18.2	9.1
Consumer price Index for industrial workers*	1960 = 100	420	373	275	12.6	6.2
Unemployment (d)**	..	162	143	82	13.3	10.2

Notes: (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(...) = Not available

Adequate power for APPLE

SIR,—I was pained to see Dr V. S. Venkatavaradan's article "Snags in space research" appearing in *Commerce* dated July 4, 1981.

As all our press releases have repeatedly stated, even without the deployment of the north side solar panel, we have more than adequate power to run the entire *APPLE* mission. In fact the power obtained from the south side deployed solar panel and the partial power from the undeployed panel is at least 30 watts more than what we need. We had also stated that the sizing of the power panel was based on the transfer orbit requirements during which both panels are supposed to be in the stowed configuration. I had also made it clear that the effect on the non-deployed panel was essentially to make it difficult for us to achieve the three axis stabilisation due to the imbalance introduced into the configuration and the occultation of one of the sun sensors. However, contingency methods exists through which the three axis stabilisation was successfully achieved.

The statement that the satellite could not be accurately positioned is a patently false statement. Every manoeuvre carried out in *APPLE* is standard manoeuvre required for all similar communication satellites. These include:

(a) Spinning the satellite, orienting it in the right direction and firing the ABM;

(b) Despinning of the satellite and deployment of the solar panels.

(c) Achieve the three-axis stabilisation after acquiring sun, enabling solar panels to track the sun, again orienting the spacecraft and then acquiring the earth. In this mode with jets controlling the three axis stabilisation, start the momentum wheel and finally transfer the stabilisation to the wheel.

(d) Raise the perigee further by firing hydrazine thrusters to circularise the orbit and achieve almost 24 hours drift orbit.

(e) Finally provide a slow drift to move the satellite to its intended position, apply drift correction to stop the drift and achieve exact 23 hour, 56 minutes 4.1 second orbit.

It is customary to provide a slow drift of 1 to 2° per day in the drift orbit, to reduce fuel consumption. Higher drift rate would require higher correction to stop the drift (well known Newton's third law of motion) and this will involve unnecessary consumption of fuel. Infact, *INSAT* will use a drift rate of about 1° per day.

All the above manoeuvres are standard ones used for all geosynchronous satellites carrying solid apogee motors and part of the mission operation procedures. These manoeuvres generally take about 30-45 days depending on optimisation requirements in each case. *METEOSAT*, our co-passenger is still in the drift orbit and will arrive on position only by about 25th of this month.

Regarding hydrazine fuel, we had 42 kg fuel, of which approximately 32-35 kg was earmarked for orbit raising and 7-10 kg for station keeping to provide service for a minimum period of one year. The small uncertainty is essentially due to 3 sigma dispersion errors which could be encountered in the behaviour of the parent rocket and the apogee motor. As predicted, we have consumed approximately 34 kg fuel for orbit raising and orbit manoeuvres, with a balance of about 8 kg left for station keeping, which is adequate for one year life mission. It may be noted that approximately 1.5 gm of fuel per day is all that is needed for East-West station keeping which means for East-West station keeping alone we need only 1 kg of fuel per year. However, North-South station keeping manoeuvre requires slightly larger amount and the most conservative estimate is that *APPLE* will have at least an year's mission life, as set forth. For your information, comparative figure for *INSAT* station keeping (which is a much heavier satellite) is about 10 kg per year.

Even though, the non-deployment of one panel is essentially academic as far as *APPLE* mission is concerned, efforts are on to simulate the conditions on the ground and understand the nature of the problem. However, we will make further attempts to deploy the north side solar panel only when temperature on the hinges of the panel is favourable and bulk of the mission is accomplished. I hope you will realise that when *APPLE* mission is comfortable, it is not wise to disturb the satellite on a problem which is academic, as far as the mission is concerned. The mission operations have strictly followed the laid down procedures with a mathematical precision and the fully stabilised, operating spacecraft has been stationed at its parking place exactly as per the procedure.

Incidentally, the payloads have also been checked out and TV transmission has also been carried out which shows excellent performance of the spacecraft.

U. R. Rao
Director, ISRO Satellite Centre,
Bangalore.
July 17, 1981

Dr V. S. Venkatavaradan writes:—

Prof U. R. Rao has taken objection to only one point among the six snags I have pointed out in my article. I presume that he agrees with all the other points that I have made.

In reference to *APPLE*, I have mentioned that one of the solar panels did not open up, thereby reducing the available power. Even though it is possible to operate the satellite with only one solar panel, the fact remains that it can be operated only for a limited duration of eight hours instead of all the 24 hours as originally planned. Non opening of the solar panel is a major snag in the *APPLE* programme.

About the point regarding hydrazine, whatever I have stated about the hydrazine consumption is valid—if lot of hydrazine is spent in manoeuvres, the operational life time of the satellite will be greatly reduced. This is evident from the fact that the ISRO, which had announced that the satellite will be operable for two years, is now quoting the figure of only one year. It is fortunate that enough hydrazine is left with the satellite to operate it atleast for one year. A UNI report from Sriharikota (June 25) also confirms the delicate situation which the satellite faced regarding hydrazine.

To The Editor
LETTERS
COMMERCE WEEKLY
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CORPORATE SECTOR

In the market

Sunil Synchem

Sunil Synchem Ltd (Registered office: 17/18, Old Industrial Area, Alwar 301 001, Rajasthan) is offering for public subscription at par 2 lakh equity shares of Rs 10 each totalling Rs 20 lakhs. The subscription list opened on July 27 and will close on August 6.

The company was incorporated as a public limited company in February 1973 for the manufacture of empty hard-shell gelatine capsules. It has undertaken a project to fabricate/assemble two automatic capsule making machines to increase its installed capacity from 400 million to 800 million capsules per annum. The company has obtained an industrial licence to manufacture 24 tonnes per annum of L-methyldopa, a basic drug used for the treatment of hypertension.

Agarwal Bolts

Agarwal Bolts Ltd (Registered office: 25, Strand Road, Calcutta 700 001) is offering for public subscription at par 19,500 equity share of Rs 10 each totalling Rs 1.95 lakhs. Apart from this 10,500 equity shares of Rs 10 each at par totallling Rs 1.05 lakhs are offered for sale. The subscription list for the new equity shares as well as the application list for the equity shares offered for sale opened on July 27 and will close on August 6. The company was incorporated as a private limited company in 1971 and was converted into a public limited company in August 1980. It is licensed to manufacture 3,200 tonnes of bolts, nuts and rivets per annum.

Other developments

Indian Rayon steps up

The Indian Rayon Corporation Ltd, a multi-division company having its units in Gujarat and West Bengal, has stepped up its dividend from 15 per cent to 16 per cent for the year ended June 30, 1981. The previous year's dividend was on an enhanced capital resulting from a 1 : 4 bonus issue. The company could pay higher dividends because the disposable profits, after making lower tax provisions for 1980-81 and after writing back excess tax provisions and development rebate reserves relating to prior periods no longer required, were higher at Rs 7.05 crores as compared with Rs 4.07 crores in 1979-80. The stepping up of dividend was also a prelude to the proposed issue of non-convertible secured debentures. While releasing the working results of the company for the year 1980-81, Mr B. L. Shah, a senior director, has remarked that dividends have been stepped up also to meet the rising expectations of the shareholders of the company.

The turnover of the company for the year 1980-81 was marginally higher at Rs 61.70 crores as compared with Rs 60.53 crores during the previous year. Mr Shah claimed that but for the three and half months' strike at the Rishra units and the two and a half months' strike and lockout at the Veraval unit, the results could have been much better. Gross profit for the year at Rs 8.68 crores was 6 per cent lower than that of Rs 9.25 crores earned during 1979-80. After providing for depreciation Rs 1.94 crores (Rs 1.45 crores) and taxation Rs 2.00 crores (Rs 3.80 crores) and writing back excess provision for taxation and development rebate reserve no longer required amounting to Rs 0.91 crore and Rs 1.40 crores respectively (nil and Rs 0.07 crore respectively during the previous year), total disposable profits amounted to Rs 7.05 crores (Rs 4.07 crores). The company transferred Rs 0.15 crore (negligible) and Rs 1.63 crores (Rs 0.43 crores) respectively to capital redemption reserve and investment allowance reserve respectively. Proposed dividends would absorb Rs 0.82 crore (Rs 0.79 crore) leaving Rs 4.45 crores (Rs 2.85 crores) for transfer to general reserve. Mr Shah expected the company's sales turnover to reach the level of Rs 85 crores during 1981-82.

The company has various projects for expansion and diversification on hand, the mplementation of which would cost about Rs 70 crores. About Rs 10 crores have already been spent on the projects. The projects under various stages of implementation include increasing the capacity of viscose filament rayon yarn to 7,300 tonnes and carbon-di-sulphide to 2,750 tonnes, Rishra insulator expansion to step up the capacity for manufacture of high rated bushings and insulators by 3,200 tonnes, Halol insulator unit to manufacture high rated bushings, etc, a portland cement plant with a capacity of 5.40 lakh tonnes in Karnataka, expansion of the spinning unit at Midnapur and a project for the production of high tension transmission and sub-station equipments.

The company has proposed to issue non-convertible secured debentures of Rs 5 crores for meeting its increasing working capital requirements. The debentures will carry 13.5 per cent interest and will also be entitled to an additional interest of one per cent per annum if the company declares equity dividend exceeding 14 per cent for the immediately preceding year. The company has received the consent from the Controller of Capital Issues for the issue of the debentures. The debentures will provide for a buy back facility at par to the extent of Rs 25 lakhs in one accounting year.

Chowgule Steamships: Impressive results

Chowgule Steamships Ltd by declaring a dividend of 15 per cent for the year ended March 1981 has returned to the dividend list after a lapse of three years. The last dividend paid by the company was at 10 per cent for the year ended March 1977. The improved working results have enabled the company to wipe out the entire arrears of preference dividend for the years 1977-78, 1978-79 and 1979-80 amounting to Rs 8.55 lakhs. The company is going ahead with a huge expansion programme.

The company has reported higher income from freight earnings and charter hire receipts for the year ended March 1981 at Rs 17.61 crores compared to Rs 14.76 crores in the previous year. The net profit after providing Rs 3.28 crores (same) for depreciation was Rs 5.99 crores (Rs 1.92 crores). The equity dividend recommended absorbed Rs 114.98 lakhs (nil) and preference dividend Rs 11.40 lakhs (nil). An amount of Rs 3.15 crores (nil) is transferred to development rebate reserve and Rs 45 lakhs (nil) to statutory reserve.

The company's fleet at present comprises 5 bulk carriers totalling 269,654 dwt. The company is now proceeding with a large expansion programme involving an outlay of Rs 170 crores. One 75,000 dwt bulk carrier is already under construction at Cochin Shipyard Ltd. Another two ships of the same size also have been ordered with Cochin Shipyard. These three ships are likely to be delivered in 1983, 1984 and 1985 respectively. The company has also finalised negotiations for purchase of two container oriented bulk carriers of 35,000 dwt each with Japanese shipyard at a cost of 4,930 million yen per vessel. These ships are to be delivered in first and second quarter of 1984. These ships are container oriented with a capacity to carry 690 containers with 25 tonnes crane which are also suitably equipped for grab. The company is also negotiating for four second hand vessels of about 4,000 dwt each at a total cost of Rs 10 crores for use in coastal shipping. The company is arranging necessary bank guarantee from a foreign bank. The rupee loan to the extent of 90 per cent of the cost of expansion is expected to come from the Shipping Development Fund Committee. The balance of rupee funds will come from the company's own resources.

Star Textiles: Debenture issue proposed

Star Textile Engineering Works Ltd has enhanced the dividend rate from 15 per cent to 18 per cent for the year ended March 31, 1981 on the expanded equity capital resulting from 2:5 bonus issue during the year. It has also proposed to issue secured convertible debentures of the face value of Rs 4 crores to finance new projects for diversification and expansion. These announcements were made by Mr Suresh Mehta, chairman and managing director of the company, at a press conference in Bombay immediately after the meeting of the board of directors of the company.

The sales turnover of the company has increased from Rs 13.43 crores for the year ended March 31, 1980 to Rs 18.71 crores for the year ended March 31, 1981. This includes other income earned by the company amounting to Rs 2.28 crores (Rs 2.39 crores in the previous year). Export earnings during the year were Rs 3.1 crores including Rs 38 lakhs against technical knowhow and consultancy fees, a large part of which was tax-free. The gross profit has increased to Rs 1.98 crores from Rs 1.56 crores during the previous year. After providing for depreciation Rs 42 lakhs (Rs 24 lakhs), taxation Rs 62 lakhs (Rs 59 lakhs) and deductions for adjustments relating to previous years Rs 1.55 lakhs (Rs 5.38 lakhs), the net profit earned by the company has amounted to Rs 93 lakhs (Rs 67 lakhs). After transferring Rs 11 lakhs (Rs 4 lakhs) to investment allowance reserve, the profit available for distribution for the year ended March 31, 1981 has been Rs 82 lakhs (Rs 63 lakhs). The dividend recommended would absorb Rs 25 lakhs (Rs 14 lakhs) leaving Rs 57 lakhs (Rs 49 lakhs) for retention.

In view of the new projects being undertaken by the company, the directors have decided to augment the long-term resources required for the projects by recommending the issue of secured convertible debentures of the value of about Rs 4 crores. The debenture issue is expected to be made in the next six months or so and the conversion will be up to 40 per cent in two stages at a premium ranging from Rs 5 and Rs 7.50 subject to the approval of Controller of Capital Issues.

The total cost of the new projects envisaged in relation to this debenture issue is around Rs 10 crores and would include a textile spinning project at Ratnagiri at a cost of Rs 6.75 crores, a foundry project of Rs 3 crores and a project for the manufacture of dryers valued at Rs 20 lakhs. The spinning mill project would be for cotton, man-made and blended fibres, partially for the domestic market and partially for exports. The project would employ the latest technology in both ring spinning and open-end spinning and would manufacture specialis-

Jumbo size container

The American President Lines is now offering jumbo 45-foot container, the first of its kind, as against the conventional 40-foot container, according to Mr E. N. Palia, a representative of Forbes Forbes Cambell & Co Ltd., local agents of American President Lines. The new container will have a cargo capacity of 3,035 cubic feet representing a 27 per cent increase over the conventional containers.

The dimensions of the new container are 9' x 6½'. In the light of the fact that handling and transportation costs are determined on a unit basis, the new container inasmuch as it has an additional 27 per cent cargo capacity will yield a significant cost advantage to users.

Initially, the 45′ container will be designated for on-deck stowage only and will go into service to haul less than container load (LCL cargo) between major Asian ports and North Eastern US destinations. At a later stage APL's 45-footers will be deployed on selected inter-model routes resulting in improved operational efficiency. Pilot runs of the 45′ container have already commenced on a series of trans-pacific crossings to familiarise the land operational personnel and the crew of its working.

Constructed out of aluminium with steel frames, the improved containers are designed for a payload of 54,300 lb and can be operated on inter-state highways with a load bearing capacity of 50,000 lb.

ed high quality yarns including industrial yarns. The foundry project would be for manufacturing high quality castings mainly for captive consumption. as well as meeting the growing needs of associate concerns. The foundry would be located either at Dharwar, Karnataka or in Ratnagiri. The manufacture of dryers is for captive requirements of rotary and flat bed screen printing machines to achieve self-sufficiency.

The turnover during the year 1981-82 up to June 30, 1981 has been of the order of Rs 3 crores. According to Mr Mehta, the sales turnover for the current year is expected to exceed Rs 21 crores.

Indian Oxygen: 9 per cent interim

Sales of Indian Oxygen Ltd for the half-year ended March 1981 amounted to Rs 35.77 crores compared to Rs 28.55 crores for the half-year ended March 1980. The net profit, after providing Rs 66 lakhs (Rs 63 lakhs) for depreciation, Rs 73 lakhs (Rs 72 lakhs) for interest payments and Rs 2.26 crores (Rs 99 lakhs) for taxation, was Rs 1.48 crores (Rs 67 lakhs). The interim dividend recommended is 9 per cent.

Amar Dye-Chem: Turnover down

The sales turnover of Amar Dye-Chem Ltd declined by 7.6 per cent from Rs 30.91 crores during 1979 to Rs 28.56 crores in 1980. Reportedly due to heavy cost excalations, the gross profit during the year slumped by 47.7 per cent to Rs 1.50 crores from Rs 2.88 crores in the previous year. The company maintained the equity dividend at 12 per cent for the year 1980—the silver jubilee year of the company. At the recent annual general meeting of the company, the chairman, Mr J. H. Doshi, informed the shareholders that during the first five months of 1981 the company's turnover was slightly higher at Rs 9.80 crores (Rs 9.77 crores). However, he was doubtful whether this improvement could be sustained since the textile industry, the main consumer of dyestuffs, was not expected to do well. On the export front, the exports during 1980 (including those of its wholly-owned subsidiary) exceeded those in previous year by over Rs 6 crores.

The company had decided to instal a coal-fired boiler to save fuel cost up to Rs 37 lakhs annually but since the delivery of the boiler was delayed this fuel reduction could not be effected.

The company has plans to put up a plant for the manufacture of basic chemicals such as ortho nitro chloro benzene (which would provide base for intermediates), jointly with the West Bengal Industrial Development Corporation. The project is estimated to cost Rs 7 crores to Rs 8 crores and a company, namely "Eastern Organics Ltd" with an initial capital of Rs 5 crores, has already been registered. The paid-up capital of the new company would be Rs 2.5 crores to Rs 3 crores, of which Amar Dye-Chem Ltd has agreed to provide 25 per cent.

Indian Dyestuff maintains

Indian Dyestuff Industries Ltd has reported higher sales for the year ended March 1981 at Rs 57.63 crores compared to Rs 54.25 crores in the previous year. The net profit, after providing Rs 1.99 crores (Rs 1.87 crores) for depreciation and making no provision for taxation (Rs 0.75 lakhs), amounted to Rs 1.67 crores (Rs 2.27 crores). The equity dividend recommended for the year under review is 13 per cent (same). An amount of Rs 59 lakhs (Rs 87 lakhs) is transferred to investment allowance reserve and Rs 6.70 lakhs (Rs 7.50 lakhs) to general reserve.

Hindoostan Spinning: Modernisation apace

Turnover of the Hindoostan Spg & Wvg Mills Ltd for the year ended March 1981 increased to Rs 71.56 crores from Rs 60.18 crores in the previous year. The net profit, after providing Rs 1.02 crores (Rs 85.70 lakhs) for depreciation, was Rs 1.90 crores (Rs 2.66 crores). The equity dividend recommended for the year under review is 12 per cent (10 per cent). An amount of Rs 26.60 lakhs (nil) is transferred to development rebate reserve and Rs 88.40 lakhs (nil) to investment allowance reserve. Exports during the year under review were Rs 13.19 crores (Rs 12.80 crores).

The first phase of the company's modernisation programme has been completed with the installation of new machinery worth Rs 2.34 crores during the year under review. The company is now taking up is second

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Auto Tractors goes into production

The Auto Tractors Limited, a State Government undertaking at Pratapgarh (PU), set up at a cost of Rs 18.86 crores, has gone into production. The programme envisages manufacture of 500 tractors during the current financial year which is expected to be increased to 6,000 numbers by 1986. UP's Industries Minister, Mr Niaz Hasan, who rolled out the first two tractors manufactured by ATL on July 3, told *Commerce* that a new programme costing Rs 10 crores would be taken up for production of 15,000 sets of engines and light commercial vehicles under a new sub-project of ATL. It is proposed to increase the initial capacity of 200 engines to 2,000 by 1986. The designing and development work of the new sub-project for production of engines and light commercial vehicles is expected to be completed in two years. The first model of the engine is likely to be ready by June 1984.

With the commissioning of the Pratapgarh project, Leyland 154—the powerful 28 bhp tractor of British Leyland, UK—is now being manufactured in India as Pratap-284 by ATL.

modernisation programme involving an outlay of Rs 5.51 crores.

Fouress bags an order worth one crore

Fouress Engineering (India) Pvt Ltd, the leading manufacturers of industrial valves in the country has just bagged an order valued at £490,186 for the supply of 54 Fouress-Metroflex Gas Tight Isolators for Ramagundam thermal power station, Andhra Pradesh, from Ansaloo, Italy, against stiff global competition.

This is deemed as an export order and with the cash subsidies and incentives the order is worth nearly rupees one crore. This is inded a major breakthrough for the company in the field of gas tight isolators.

Metroflex is a flexible sealing technology primarily used in gas tight isolators having a wide application in large industrial plants such as steel works, power stations, cement works etc without having to shut down the main process.

As this technology is relatively new to India, Fouress entered into technical collaboration with M/s Metroflex Grossventilbau AG, Switzerland for the manufacture of these gas tight isolators in this country.

The execution of this present order will enable the country to save precious foreign exchange amounting to half a million pound sterling.

National Insulated Cable: Higher revenue

National Insulated Cable Company of India Ltd has reported higher revenue for the year ended April 1981 at Rs 17.36 crores compared to Rs 14.14 crores in the previous year. The net profit, after providing Rs 25.44 lakhs for depreciation and Rs 44.53 lakhs for taxation, was Rs 50.50 lakhs. The equity dividend recommended for the year under review is 12 per cent (10 per cent). An amount of Rs 8.77 lakhs is transferred to investment allowance reserve and Rs 17.48 lakhs to general reserve. The company's diversification programmes have been progressing well. Furmanite Nicco Ltd commenced commercial operations in November 1980. It has earned a gross profit of Rs 8.16 lakhs for the period ended April 1981.

The Naini Tal Bank Ltd: Deposits increase

Total deposits of the Naini Tal Bank Limited increased to Rs 14.09 crores as on December 31, 1980 as against Rs 10.27 crores as on December 31, 1979 registering a growth of about 37 per cent. The average deposit per branch increased to Rs 54.21 lakhs as against Rs 46.68 lakhs last year. Credit expanded marginally to Rs 6.08 crores as on December 31, 1980 from Rs 5.97 crores as at the end of the previous year. The bank's priority sector advances continued to constitute 51 per cent of total advances. The bank's net profit after all provisions and taxes stood at Rs 3.73 lakhs for 1980 as against Rs 3.01 lakhs in 1979. The bank proposed to maintain the dividend at 10 per cent for 1980. The bank opened four new branches during 1980, all in Uttar Pradesh, raising the number of branches to 26.

R. B. Rodda: Higher sales

R. B. Rodda & Co Ltd has reported higher sales for the year ended March 1981 at Rs 13.66 crores compared to Rs 13.12 crores in the previous year. The net profit, after providing Rs 63.61 lakhs (Rs 48.21 lakhs) for depreciation, was Rs 41.83 lakhs (Rs 34.06 lakhs). The dividend absorbed Rs 1.56 lakhs (same). An amount of Rs 32 lakhs (Rs 33.80 lakhs) is transferred to investment allowance reserve and Rs 8.50 lakhs to general reserve.

Transpek Industry to expand

The sales of Transpek Industry Limited, Baroda, for the first five months of 1980 have gone up by 31 per cent and reached a new level of Rs 1.74 crores as against Rs 1.33 crores for the corresponding period of the previous year. The company is planning to expand the present capacity of thionyl chloride from 450 tonnes to 1,200 tonnes. The production of thionyl chloride has gone up in the current year. The company has also developed new products in its R & D department such as sulphur di-chloride, 2-dimethyl amino ethyl chloride, hydrochloride and other pharmaceutical and chemical intermediates. The company will very shortly approach the licensing authorities for putting up a commercial plant—for the above products.

English Electric: Higher sales

Sales of the English Electric Company of India Ltd for the year ended March 1981 increased to Rs 29.04 crores from Rs 24.38 crores in the previous year. The net profit, after providing Rs 4.42 crores (Rs 3.65 crores) for taxation, was Rs 1.93 crores (Rs 1.65 crores). The equity dividend recommended for the year under review is 25 per cent. An amount of Rs 14.14 lakhs (Rs 5.36 lakhs) is transferred to investment allowance reserve and Rs 66.64 lakhs (Rs 61.05 lakhs) to general reserve.

Forthcoming company meetings

AUGUST 1 TO AUGUST 7

Piramal Rasayan Ltd, Walchand Hirachand Hall, Indian Merchants Chamber Building, 76, Veer Nariman Road, Churchgate, Bombay-400 020. (*August* 7, 4.30 *p.m.*)

PUBLIC SECTOR

Hindustan Cables poised for major expansion

Hindustan Cables Ltd (HCL) has two factories, one at Rupnarainpur and other at Hyderabad having a total production capacity of about 28 lakh conductor kilometres (CKM) of jelly filled cables. The company manufactured 18.73 lakh CKM of jelly-filled cables during 1980-81. To meet the growing demand of the Posts and Telegraphs Department for telephone cables and also to keep pace with advanced technology, HCL has embarked upon a major expansion programme. There are two on-going projects at Rupnarainpur, one for creating additional capacity of 6 lakh CKM of jelly-filled cables and the other a replacement and modernisation programme involving a capital investment of Rs 9.75 crores, which would generate an additional capacity of 8 lakh CKM. Besides, a proposal for balancing equipment at a capital outlay of Rs 2 crores to generate an aggregate additional capacity of 2 lakh CKM at both the factories awaits Government consent.

Moreover, under the Sixth Plan, a project for the creation of an additional capacity of 30 lakh CKM of jelly-filled cables at Hyderabad costing about Rs 50 crores has been accepted in principle by the Public Investment Board. The foreign exchange component of the project amounting to $25.5 million (about Rs 21.98 crores) will be loaned by the World Bank. The project for establishing a R & D unit for HCL at Hyderabad with a capital investment of Rs 4 crores and a recurring expenditure of Rs 90 lakhs per annum has already been cleared by the Government.

The completion of the on-going and new schemes under the Sixth Plan will generate an additional capacity of 44 lakh CKM of dry core cables (including jelly-filled) and 2,000 tube kilometres (TKM) of co-axial 174 type at a total investment of about Rs 95 crores. Completion of these schemes is expected to generate an additional turnover of Rs 115 crores, an additional profit of Rs 10 crores and additional employment to 2,500 employees.

Financial analysis of operations of non-financial companies

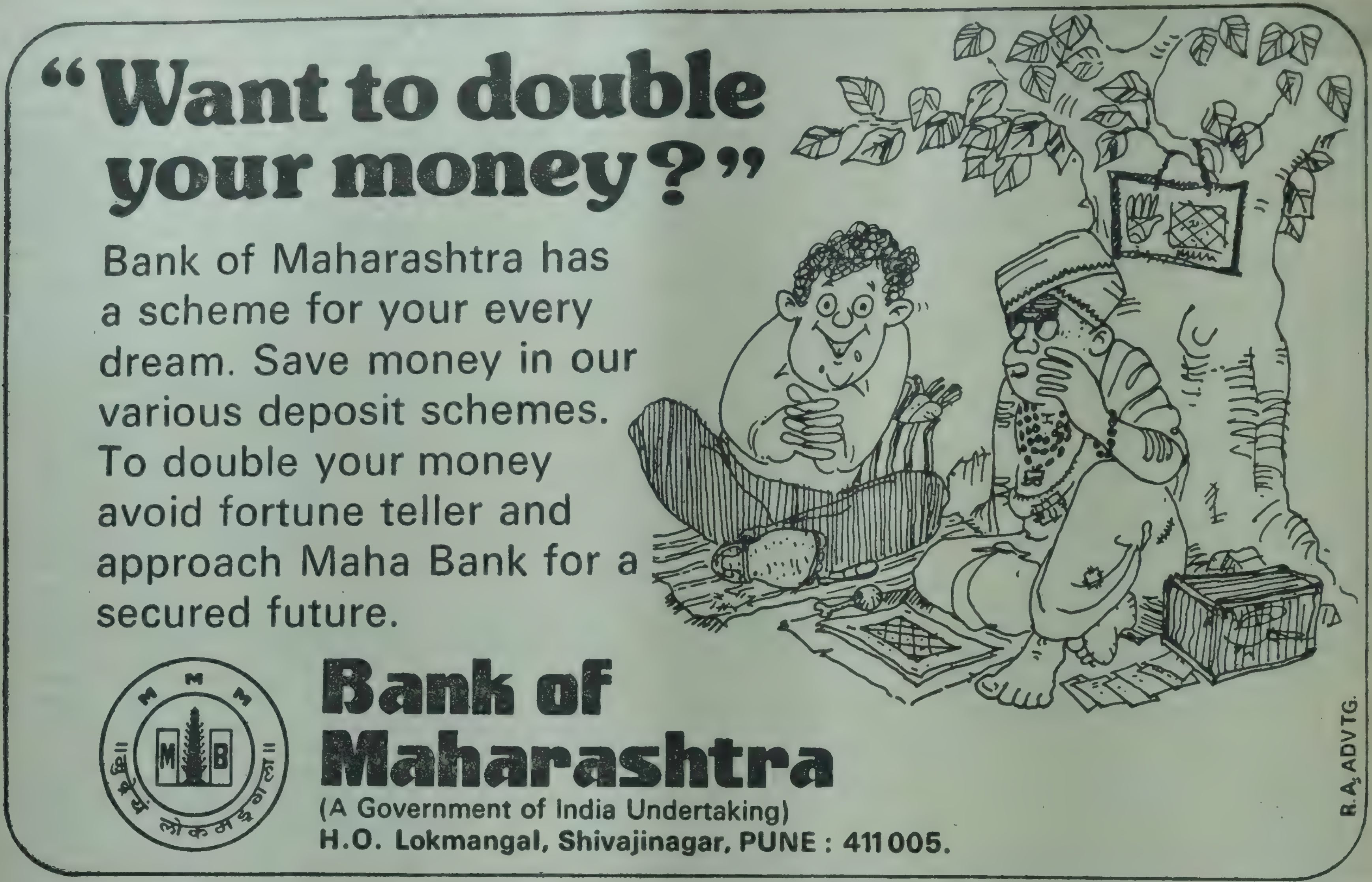
Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Asian Cables Corporation		Industrial Cables (India)		Otis Elevator Company		Siemens India		W.S. Insulators of India	
Industry Group	Electrical goods		Electrical goods		Electrical goods		Electrical goods		Electrical goods	
	Year ended December		Year ended October		Year ended November		Year ended September		Year ended September	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	457.5	533.2	488.9	617.7	420.6	508.7	1,846.2	2,103.7	378.9	439.7
(i) Paid-up capital (a+b)	201.8	201.8	191.7	191.8	157.5	157.5	720.0	720.0	157.7	157.7
(a) Equity	201.8	201.8	160.7	160.8	157.5	157.5	720.0	720.0	117.7	117.7
(b) Preference	—	—	31.0	31.0	—	—	—	—	40.0	40.0
(ii) Reserves	255.7	331.4	297.2	425.9	263.1	351.2	1,126.2	1,383.7	221.2	282.0
2. Borrowings (i+ii)	532.0	670.5	813.9	1,128.1	13.6	5.3	875.5	1,402.3	398.7	439.4
(i) Long-term	209.5	201.6	283.2	412 2	—	—	237.5	262.1	91.5	135.0
(ii) Short-term	322.5	468.9	530.7	715.9	13.6	5.3	638.0	1,140.2	307.2	304.4
3. Non-current liabilities and provisions	—	—	—	—	—	—	302.6	336.4	7.1	9.6
4. Current liabilities and provisions	261.0	313.4	279.3	362.4	1,213.7	1,427.5	2,834.1	4,054.6	250.1	445.9
Assets (at the end of the year)										
5. Gross fixed assets	685.9	724.4	924.5	1,183.6	325.9	379.1	2,438.5	2,904.0	620.2	698.7
6. Less depreciation	220.8	248 7	245.0	309.2	168.4	197.1	1,253.9	1,491.1	171.1	197.1
7. Net fixed assets (5—6)	465.1	475.7	679.5	874.4	157.5	182.0	1,184.6	1,412.9	449.1	501.6
8. Current assets (i+ii+iii)	759 6	1,015.6	902.6	1,233.8	1,487.1	1,756.6	4,664.0	6,474.9	585.7	833.0
(i) Inventories	383 7	572.6	597.8	659.7	651.1	1,033.7	2,465.7	3,044.6	237.0	351.2
(ii) Receivables and loans and advances	340.1	320.6	259.6	514.1	548.9	638.6	2,167.8	3,366.2	299.8	361.6
(iii) Others	35.8	122.4	45.2	60.0	87.1	84.5	30.5	64.1	48.9	120.2
9. Other assets	25.8	25.8	—	—	3.3	2.9	9.8	9.2	—	—
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**1,250.5**	**1,517.1**	**1,582.1**	**2,108.2**	**1,647.9**	**1,941.5**	**5,858.4**	**7,897.0**	**1,034.8**	**1,334.6**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,513.3	1,973.8	2,075.3	3,366.7	1,118.3	1,326.2	9,412.2	12,578.1	895.7	1,208.2
11. Increase in stock of finished goods and work in progress	21.5	145.2	99.9	41.5	184.7	182.4	185.6	316.2	–10.7	37.2
12. Value of production (10+11)	1,534.8	2,119.0	2,175.2	3,408.2	1,303.0	1,508.6	9,597.8	12,894.3	885.0	1,245.4
13. Other income	3.7	5.2	12.3	20.0	25.1	23.2	360.0	432.0	44.9	42.7
Expenditure										
14. Materials, stores and other mfg. expenses	1,093.8	1,480.3	1,595.5	2,529.1	651.8	815.7	7,018.7	9,429.1	449.0	657.8
15. Current repairs	8.8	7.9	36.9	72.1	12.3	14.1	83.4	145.0	39.9	62.8
16. Salaries and wages	79.5	102.2	97.4	133.8	289.0	313.5	945.5	1,237.6	112.7	119.7
17. Welfare expenses	16.4	19.7	10.6	31.7	47.2	35.4	149.9	181.3	7.6	12.6
18. Managerial remuneration	1.2	1.0	0.1	0.1	0.6	0.2	—	—	—	0.3
19. Other expenses	98.6	121.6	155.0	245.2	101.1	106.4	668.8	870.2	116.0	155.0
20. Depreciation	24.8	28.0	37.9	64.7	31.4	32.1	163.8	254.9	24.6	26.0
21. Other provisions	—	—	—	—	0.1	0.5	28.1	33.8	—	—
22. Operating profit (12+13)—(14 to 21)	215.4	363.5	254.1	351.5	194.6	213.9	899.6	1,174.4	180.1	253.9
23. Interest	69.7	90.9	98.1	151.5	3.0	1.9	122.0	213.2	57.5	63.2
24. Tax provision	69.0	164.0	—	43.0	118.3	132.5	501.0	585.0	34.0	105.0
25. Profit after tax (22—23—24)	76.7	108.6	156.0	157.0	73.3	79.5	276.6	376.2	88.6	85.7
Appropriations										
26. Dividends (i+ii)	40.4	40.4	11.4	27.3	33.1	31.5	115.2	122.4	21.5	21.5
(i) Equity	40.4	40.4	9.6	24.1	33.1	31.5	115.2	122.4	17.7	17.7
(ii) Preference	—	—	1.8	3.2	—	—	—	—	3.8	3.8
27. Profit retained (25—26)	36.3	68.2	144.6	129.7	40.2	48.0	161.4	253.8	67.1	64.2
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,538.5**	**2,124.2**	**2,187.5**	**3,428.2**	**1,328.1**	**1,531.8**	**9,957.8**	**13,326.3**	**929.9**	**1,288.1**
Operational indicators (per cent)										
(a) Net worth/total net assets	36.6	35.1	30.9	29.3	25.5	26.2	31.5	26.6	36.6	32.9
(b) Inventories/net sales	25.4	29.0	28.8	19.4	76.1	77.9	26.2	24.2	26.5	29.1
(c) Operating profit/net sales	14.2	18.4	12.2	10.4	17.4	16.1	9.6	9.3	20.1	21.0
(d) Operating profit/total net assets	17.2	24.0	16.1	16.7	11.8	11.0	15.4	14.9	17.4	19.0
(e) Profit after tax/net worth	16.8	20.4	31.9	25.4	17.4	15.6	15.0	17.9	23.4	19.5
(f) Equity earning/equity capital	38.0	53.8	96 0	95.6	46 5	50.5	38.4	52.3	72.0	69 6
(g) Equity dividend	20.0	20.0	15.0	15.0	21.0	20.0	16.0	17.0	15.0	15.0
(h) Equity dividend coverage. (No. of times)	1.9	2.7	6.4	6.4	2.2	2.5	2.4	3.1	4.8	4.6
(i) Paid-up value per equity share (Rs.)	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	240.00	335.00	10.50	30.00	46.00	56.00	43.00	56.00	23.00	35.00
(k) Gross yield	8.3	6.0	14.3	5.0	4.6	3.6	3.7	3.1	6.5	4.3
(l) Gross fixed assets formation	9.0	5.0	38.5	28.0	15.1	16.3	18.0	19.1	4.3	12.7
(m) Debt/equity	0.46:1	0.38:1	0.58:1	0.67:1	..	..	0.13:1	0.12:1	0.24:1	0.31:1

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometimes made in other items also. Totals may not add up due to rounding off. * 14 months period.



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BANK OF MADURA LIMITED

Registered Office : 33, North Chitrai Street, Madurai-625 001

Abridged Balance Sheet as on 31st December, 1980

CAPITAL AND LIABILITIES

As on 31-12-1979 Rs.			Rs.
56,13,250	Capital Paid-up		75,49,950
8,804	Share fractional certificates and premium		8,704
53,07,265	Reserve Fund etc.		63,15,000
96,63,17,042	Deposits		1,17,29,35,160
4,58,26,270	Borrowings from Banks IDBI etc.		7,35,51,035
2,36,72,760	Bills Payable..		3,25,74,790
21,03,79,283	Bills for collection acceptances endorsements and chit liabilities as per contra		31,28,67,658
10,95,02,456	Other Liabilities		12,53,52,998
	Profit and Loss Account		
9,990	Brought Forward ..	59,505	
11,10,840	Profit for the year 1980	17,71,477	
11,20,830		18,30,982	
10,61,325	Less appropriation to Reserve and Dividend	17,62,730	
59,505			68,252
1,36,66,86,635			1,73,12,23,547

PROPERTY AND ASSETS

As on 31-12-1979 Rs.		Rs.
24,16,48,551	Cash and Bank Balances	30,29,90,863
17,97,22,456	Investments	21,40,21,560
70,08,62,403	Loans and Advances	86,36,86.520
21,03,79,283	Bills receivable acceptances, endorsements, chit assets as per contra	31,28,67,658
43,57,709	Premises	42,46,519
58,38,882	Furniture and Fittings	63,29,890
2,38,58,735	Other assets	2,70,61,921
18,616	Non-banking assets	18.616
1,36,66,86,635		1,73,12,23,547

R. M. MUTHIAH
Chairman.

EQUITIES

Dalal Street resumes on promising note

Bombay, July 27

Dalal Street began humming with activity again on July 21 when trading was resumed after the suspension of operations since June 26. The market was, however, open in the intervening period on July 2 and July 17 for the limited purpose of squaring-up of outstanding business. Equity prices were marked up sharply on frantic short-covering and bull grip. Shares, however, reacted towards the end of the week. Activity was large and the undertone at the close of the week was steady-to-better.

The initial firmness was attributed to the withdrawal of the earlier restrictions imposed on 'A' group shares and encouraging bonus issue announcements. The drop in later dealings was in the nature of a technical reaction. The BSE authorities have, however, imposed fresh restrictions on 10 volatile scrips to curb excessive speculative business. Operators have to pay daily margins at the rate of 3 per cent in the case of 10 scrips.

This apart, brokers have to file a daily statement of their business in 10 scrips and pay additional special margins as per the rules laid down. Members have also been warned against excessive speculative trading. If they do so, the authorities will impose new heavy margins on those members violating the rules. Free trading without any restrictions has been allowed in the remaining shares in 'A' group as well as in 'B' group.

The restricted scrips, with minimum margins in bracket, are Century (Rs 20), Tata Steel (Rs 10), Baroda Rayon (Rs 10), Hindustan Motors (Re 1), Gwalior Rayon (Rs 2), Premier Automobiles (Rs 7), Reliance (Rs 3), Hindustan Aluminium (Rs 2), TELCO (Rs 15) and Great Eastern Shipping (Rs 2).

Century opened strong at Rs 821 and rallied further to Rs 853 before closing at Rs 816, with a net gain of Rs 27. The profit-taking at the improved rates was attributed to labour unrest at the company's Kalyan plant. Tata Steel spurted from Rs 298 to Rs to 361 before reacting to Rs 345.50. ACC reacted from the week's high at Rs 208 to Rs 178 because the increase in retention price by Rs 34.74 per tonne fell short of the industry's expectations.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 18-7-81	High	Low	Closing quotations 25-7-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	240.00*	245.00	240.00	245.00
Bombay Dyeing (25)	97.00	109.00	93.00	95.00
Central India (50)	68.00	68.00	64.00	67.00*
Century (100)	789.00	853.00	813 00	816.00
Dawn (50)	76.00*	77.00	73.00	73.00
Elphioston (50)	50.00*	—	—	50.00*
Finlay (100)	122.50*	—	—	122.50*
Gokak (100)	214.00*	213.00	209.00	209.00
Gwalior Rayon (10)	53.50	61.00	57.75	59.75
Khatau (100)	252.50	270.00	255.00	265.00
Koninoor (100)	67.00	—	—	67.00*
Morarjee (100)	270.00*	270.00	260.00	260.00
National Rayon (100)	375.00	400 00	390.00	390.00
New Great Eastern (100)	99.00*	90.00	88.00	88.00
Phoenix (100)	46.50*	47.00	45.00	47.00
Podar (10)	8 75*	8.75	8.25	8.75
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	73.50*	73.50	72.00	72.00
Standard (100)	623.00	639.00	592.00	597.00
Svadeshi (100)	175.00*	175.00	172.00	175.00
Swan (100)	245.00*	245.00	235.00	240.00
Tata Mills (25)	24.00	34.00	25.00	32.00
Electric				
Ahmedabad (100)	95.00	115.00	100.00	108.00
Andhra Valey (100)	150.00	161.00	150.00	161 00
B.Subarban(100)	112.50	119.00	112.50	119.00
Tata Hydro (100)	150.00	161.00	155.00	160.00
Tata Power (100)	150.00	165.00	150.00	160.00
Steel				
Mukand (10)	29.00	32.00	25.50	26.25
Tata Steel (100)	298.00xd	363.00	328.00	345.50
Engineering				
Larsen & Toubro (10)	64.00cd	67.00xd	63.50xd	64.00xd
Tata Eng. & Loco (100	665.00cd	702.00xd	650.00xd	652.00xd
S.L.M. Maneklal (100)	195.00*	200.00	195.00	200.00
Voltas (100)	286.00*	286.00cr	225.00xr	225.00xr
Walchandnagar (100)	188.00	192.00	183.00	191.00
Dyes & Chem				
Amar Dye-Chem (100)	167.50	170.00	165.00	170.00
Indian Dyestuff (100)	260.00	280.00	250.00	250.00
Polychem (50)	72.00	76.00	74.00	75.00
Tata Chemical (10)	68.00	73.00	68.00	68.75
Shipping				
Great Eastern (10)	65.50	72.00	61.00	63.50
Scindia (20)	31.50	37.50	31.00	31.75
Cement				
A.C.C. (100)	170.00	208.00	172.00	178.00
Shree Digvijay (100)	170.00	185.00	170.00	175.00
Sugar				
Maharashtra (50)	57.00*	58.50	56.00	56.50
Phaltan (50)	43.00	—	—	43.00*
Miscellaneous				
Bombay Burmah (25)	45.00	46.00	44.50	44.50
Hindustan Motors (10)	25.75	31.00	28.50	28.50
Premier Automobiles (100)	260.00	262.00	232.00	252.00
Pre. Construction (50)	80.00	80.00	78.00	80.00
Sirpur Paper (10)	30.50	35.00	30.50	32.75
Tata Oil (25)	106.00	120.00	106.00	110.00
W. Coast Paper (100)	115.00	117.00	115.00	115.00
Wimco (10)	14.00	14.35	13.90	14.25
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	347.00	385.00	358.00	362.00
Century Enka (100)	1,100.00*	—	—	1,100.00*
Garware Nylons (10)	38.50	40.00	37.00	37.00
Gold Mohur (100)	98.00*	—	—	98.00*
Indian Rayon (10)	76.50	86.00	77.50	81.00
J. K. Cotton (10)	21.50	22.50	20.50	21.00
J. K. Synthetics (10)	53.00	55.50	53.00	53.00
Lakshmi Vishnu (100)	60.00*	59.00	59.00	59.00
Mafatlal Fine (100)	261.25cd	250.00xd	242.50xd	245.00xd
Mafatlal Industries (125)	385.00	395.00	385.00	392.50
Modella Woollen (10)	10.00*	10.00	10.00	10.00
Modipon (10)	67.00*	—	—	67.00*
Nirlon (10)	73.00	79·00	65.50	67.00

	Closing quotations 18-7-81	High	Low	Closing quotations 25-7-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	45.00	47.50	45.00	47.50
Reliance Textile (10)	102.50	112.00	105.00	108.25
S. I. Viscose (100)	270.00	300.00	272.50	277 50
Stretch Fibres (10)	9.00*	9.50	9.00	9.50
Swadeshi Polytex (10)	16.50	16.50	16.00	16.00
Electric				
Amalgamated (10)	8.50	—	—	8.50*
Surat (100) ...	95.00*	99.00	99.00	99.00
Cement				
Mysore Cement (10)	33.50	34 00	32.00	34.00
Saurashtra Cement (100)	115.00	—	—	115.00*
Paper				
Andhra Paper (100)	245.00*	235.00	235.00	235.00
Bhadrachalam (10)	19.50*	—	—	19.50*
Jayant Paper (100)	177.50	177.50	165.00	170.00
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	37.50*	39.50	37.50	38.50
Ferro Alloys (100)	300.00	297.50	287.50	297 50
Hind Aluminium (10)	51.50	56.50	54.00	55.00
Khandelwal Ferro (100)	140.00*	—	—	140.00*
Mahindra Ugine (10)	58.00	62.00	56.00	56.00
Tata Yodogawa (100)	175.00*	130.00	130.00	130.00
Engineering				
Associated Bearings (100)	385.00	392.50	387.50	392.50
Bimetal Bearings (10) ...	43.00	44.50	43.00	43.00
Blue Star (10)	34.50	40.50	37.00	39.00
Elecon Engineering (100)	435.00	452.50	440.00	452.50
Gujarat Steel Tube (100)	575.00	700.00	565.00	700.00
Hindustan Brown (100)	306.25*	—	—	306.25*
Ingersoll-Rand (10) ...	110.00	109.00	106.00	106.50
Jyoti (100)	210.00cd	230.00xd	200.00xd	230.00xd
Kirloskar Cummins (100)	550.00	562.50	547.50	550.00
Kirloskar Oils (10) ...	32.00xr	34.00	32.50	33.00
Kirloskar Pneumatic (10)	53.50*	60.00	53.50	58.00
Mahindra (10)	54.00	63.00	55.50	56.50
New Standard (100) ...	125.00	125.00	120.00	125.00
Sandvik Asia (100) ...	350.00	352.50	347.50	352.00
Vulcan-Laval (10) ...	37.50	38.00	35.00	35.50
Zenith Steel (10) ...	57.00	59.00	45.00	57.00
Cables & Elec.				
Asian Cables (100) ...	337.50*	—	—	337.50*
Bajaj Electricals (100) ...	170.00*	182.50	170.00	182 50
Crompton Greaves (100)	375.00	—	—	375.00*
Otis Elevator (10) ...	54.50*	54.50	53.00	54.00
Siemens India (10) ...	50.00	57.50	50.00	55.00
Chemicals				
BASF (10)	58.50	62.00	57.00	60.00
Bayer (India) (100) ...	252.50	260.00	250.00	260.00
Chem & Fibres (10) ...	22.00	22.50	21.50	22.50
Colour-Chem (100) ...	220.00	220.00	212.50	212.50
German Remedies (10)	26.00	26.00	25.50	25.50
Gujarat State Fert. (100)	428.00	450.00	430.00	431.00
Hindustan Lever (10) ...	44.00	45.50	43.00	43.00
Indian Organic (100) ...	235.00xd	340.00	325.00	330.00
National Organic (100)	237.00	245.00	228.00	236.00
Pfizer (10)	23.50	25.50	23.50	25.50
Polyolefins Ind. (100) ...	295.00	320.00	295.00	310.00
Sandoz (10)	27.50	28.50	27.50	27.50
Synthetics (100) ...	115.00	120.00	109.00	110.00
Warner-Hindustan (10)	25.00	24 50	23.00	24.00
Zuari Agro (10)... ...	26.00	30.50	26.00	26.00
Miscellaneous				
Bajaj Auto (100)	1,700.00	1,900.00	1,700.00	1,900.00
Bombay Oxygen (100)	120.00	125.00	120.00	122.50
Cadbury (10)	21.75	21.50	20.00	20.50
Camphor & Allied (100)	212.50	235.00	210.00	230.00
Ceat Tyres (100) ...	197.50	207.50	200.00	200.00
Colgate-Palmolive (10)	147.00	155.00	146.00	146.00
Empire Industries (15)	29.00*	29.50	29.25	29.50
Fibre glass (10) ...	19.50*	19.50	18.75	19.25
Gammon India (10) ...	20.50*	25.50	20.00	25.50
Hindustan Ferodo (10)	42.00*	40.00	40.00	40.00
Hoechst Dyes (10) ...	27.00	27.00	26.25	27.00
Indian Hotels (10) ...	105.00	108.00	97.50	100.00
Motor Industries (100)	460.00	500.00	455.00	465.00
Tata-Finlay (10) ...	13.75	14.00	13.00	13 00

Notes: Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report ** During the week ended July 18, 1981 the bombay stock Exchange remained open for trading only on July 17. The just normal trading was on June 26, after which the market was open on July 2 and July 17 for squaring - up of outstanding business.

Market Gossip

Modi Rubber's take-over of Bombay Tyres

THE Government has approved the take-over of Bombay Tyres International Ltd, formerly known as Firestone Tyre & Rubber Co of India Private Ltd, by Modi Rubber Ltd. According to the original deal finalised in early 1980 between Modi Rubber Ltd and Firestone Tire & Rubber Company of Akron, USA, the entire shareholding of the US company in Bombay Tyres amounting to 33.30 lakh equity shares of Rs 10 each would be transferred at par to Modi Rubber. Bombay Tyres has a total paid-up capital of Rs 4.5 crores, 74 per cent of which was held by the US company. According to the final approval, the Government has allowed the payment of Rs 9 for the Rs 10 equity share. The book value of an equity share of Bombay Tyres at the end of 1978-79 was Rs 39 and the market price on July 17, 1981 was only Rs 13. The value fixed at Rs 9 per share for the purpose of payment to the US company seems to have been fixed after considering the need for modernising the Bombay Tyres' plant which with an installed capacity of 11 lakh automobile tyres and tubes each could produce only 7.85 lakh tyres and 6.89 lakh tubes during 1978-79. It may be recalled that the employees of Bombay Tyres and the Bombay Taximen's Union had been making a bid to purchase the US company's shareholdings in Bombay Tyres even by offering Rs 1 crore more than what Modi Rubber agreed to pay. However, after considering the ability of the contending parties in securing the latest technology needed to modernise the plant, in pumping in funds on a large scale for the purpose and in managing a large industrial undertaking, the Government has finally approved Modi Rubber's take-over of Bombay Tyres.

Modi Rubber is vying to become the largest tyre manufacturer in the country with the acquisition of Bombay Tyres. So far Dunlop India Ltd, having an installed capacity of 21.80 lakh automobile tyres and tubes and possessing an industrial licence to add 1.5 lakh truck tyres capacity has been at the top among the 13 units engaged in the manufacture of automobile tyres and tubes in the country with an overall installed capacity of 69.49 lakh numbers each per annum. Although Modi Rubber's licensed capacity is 4 lakh automobile tyres and tubes, it has applied to the Government for regularisation of its existing installed capacity of 9.5 lakh automobile tyres and tubes. In addition, the company has been issued a letter of intent to add a capacity for 2 lakh automobile tyres and tubes.

Tea in trouble

MOST tea gardens in Darjeeling and a majority of the gardens in the Dooars produced unsatisfactory results last year. South India too had a disastrous year. Only in Assam was the picture optimistic for gardens manufacturing quality teas or with above-average yields. This is the finding of the annual review of the tea industry for 1980 published by the Calcutta tea brokers, J. Thomas and Company.

However, exports over the past couple of years have seen excellent harvests worldwide. In countries where tea is state-owned, exports have been negotiated irrespective of production cost. In India consumption faces a setback partly owing to the result of high price of sugar and its poor availability. Tea movement also faced periodic difficulties because of disturbed warehouse conditions, high interest costs, high transportation charges and the disturbed situation in Assam. The fortunes for the current financial year appear to be mixed, the review says, because of likely contraction in north Indian production due to changes in agricultural practices. Domestic consumption may increase because of easier availability of sugar.

Soap prices to increase?

WITH the sharp hike in the effective customs duty on vegetable oils and allied products to 150 per cent *ad valorem*, soap prices are expected to increase. The soap industry imported mainly beef tallow, palm sterine, palm fatty acid and palm acid and corn oil, because of shortage of rice bran oil. During the last financial year the industry had reportedly imported 200,000 tonnes of these oils.

Meanwhile trade circles have come to the conclusion that it would be most uneconomic now to import vegetable oils. An estimated 30,000 tonnes of oils are on their way to this country and the trade is reportedly trying to wriggle out of remaining contracts totalling about 1,25,000 tonnes and worth over Rs 75 crores.

Rubber imports

THE Kerala Government's move to force the Centre to ban rubber imports has expectedly caused a flutter in the rubber-based industries which have termed the step as reckless and irresponsible. Not only the restrictions on rubber imports should be removed but that more quantities should be permitted for immediate import to meet the industries' requirements for the rest of the current fiscal year, it is stated. The natural rubber production in India has not increased adequately to take care of demand in the last five years and at the same time minimum stock levels to meet three months' consumption have been at dangerously low levels. These factors have only seen skyrocketing prices in the rubber market and this is exactly why, the industry circles point out, imports of rubber have been allowed by the Government. Since the indigenous prices continue to rule much higher than the statutory prices, any marginal fall in the prices arising from imports of rubber is immediately used as a lever by the rubber planters to put pressure on the Government to ban imports. The industry circles say that the Government should not yield to such pressure tactics that give one-sided advantage against the interests of the whole nation.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*July 20, 1981*	*A week ago*
Groundnut	*(Rajkot)*	538	538
Rapeseed	*(Kanpur)*	534	538
Sesamum	*(Delhi)*	620	620
Castorseed	*(Kanpur)*	283	318
Linseed	*(Kanpur)*	515	490
Sugar	*(Bombay) (a)*	606	633
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	218	218
Aluminium	*(Bombay) (d)*	1,515	1,515
Copper	*(Bombay) (e)*	3,500	3,480
Lead	*(Calcutta) (f)*	1,130	1,150
Zinc	*(Calcutta) (g)*	1,580	1,540
Gold	*(Bombay) (h)*	1,680	1,675
Silver	*(Bombay) (i)*	2,485	2,395
Caustic soda	*(Bombay) (j)*	645	585
Soda ash	*(Bombay) (k)*	238	238

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms. (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996. (j) Flakes and (k) Tata.

COMMODITIES

Cotton steady

Bombay, July 20

Steady conditions were witnessed in the spot cotton market during the past week. Spinner interest was mainly confined to medium and short staple varieties. Export inquiries were also reported for some of the finer cotton lots in view of the prospects of a selective export quota for longer staple growths.

There have been vague reports that the Government of India might allow the import of Pakistan cotton. These reports gained some credence on the return of the CCI delegation from its trip to East Asia. Subsequently, however, there have been denials, quoting official sources from New Delhi, about the import prospects, pointing out further the Government had yet to consider the question in earnest.

Reports about the progress of the monsoon in the cotton growing tracts have so far been generally favourable for plant growth. Even so, cotton circles in Bombay are inclined to wait for some more time before making any assessment of the crop prospects. Some of the flood reports reaching Bombay from several upcountry centres, have been rather disquieting.

The decision of the Government of India to allow all textile mills to import partially oriented yarn (POY) under OGL has been welcomed by the industry as well as the small crimpers who had been worried about their idle capacity. It has been clarified by the Textile Commissioner that even textile mills that do not have their own draw-texturising units could avail of the import facility.

The National Textile Corporation has announced its decision to set up two exclusively export-oriented mills, one in Gujarat and the other in Tamil Nadu.

The following has been the trend of prices of some of the leading varieties :

(Rs. per candy)

	July 17	July 10
Digvijay	5,100-5,150	5,050-5,150
Kalyan	4,800-4,900	4,750-4,850
Saurashtra CO2	4,900-5,100	4,850-5,000
Shankar 4	5,900-6,200	5,850-6,150
Maharashtra H 4	5,400-5,550	5,400-5,550
MP H4	5,300-5,450	5,300-5,450
MP Y1	4,900-5,000	4,900-5,000
MP 1007	5,200-5,300	5,150-5,250
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100

Downward trend in yarn

Bombay, July 20

A downward trend prevailed in the local yarn market last week. The prices of 150D NRC, 120D NRC, 150D CR and 120D CR declined by Rs 1.10, Rs 0.28, Rs 1.10 and Rs 0.29 to Rs 50.11, Rs 52.03, Rs 49.56 and Rs 52.31 respectively. The prices of 100D SIV and 150D Acetate however, remained unchanged at Rs 55.07 and Rs 41.85 respectively.

Jute goods recede

Calcutta, July 20

Jute goods prices in the Calcutta gunny market last week initially rallied all round in the wake of the proposal to raise the floor price of sacking at the East India Exchange. Subsequently, however, prices receded following opposition to the move from the trade which kept the market closed for three days as a protest. Activity was confined to specula-

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NOTICE

It is hereby notified for the information of the public that Voltas Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking (Refrigerator Division) for the production, supply and distribution of Domestic Refrigerators. (Proposed installed capacity : 100,000 Nos. Refrigerators. Estimated annual production : 100,000 Nos. Refrigerators). Other particulars of the proposed new undertaking are as under :

(i) Name of the proposed undertaking : VOLTAS LTD. (Refrigerator Division)

(ii) Name of authority proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking. : Voltas Limited

Board of Directors.

Mr. A. Hydari (Chairman)
Mr. A. H. Tobaccowala (Vice-Chairman and Managing Director)
Mr. J. D. Choksi
Mr. B. Reinhart
Mr. A. B. Bilimoria
Mr. R. J. Matthai
Mr. S. P. Mehta (Alternate Director for Mr. B. Reinhart)
Mr. M. L. Apte
Mr. N. J. Jeejeebhoy (Executive Director)
Mr. B. C. Randeria

(iii) Capital structure of the applicant authority and of the proposed undertaking (as on 31st July, 1981) :

Authorised :

9,98,000 Equity Shares of Rs. 100/- each	9,98,00,000
20,000 Equity Shares of 'B' Series of Rs. 10/- each ..	2,00,000
	10,00,00,000

Issued, Subscribed and Paid-up :

6,27,796 Equity Shares of Rs. 100/- each fully paid	6,27,79,600
14,117 Equity Shares of 'B' Series of Rs. 10/- each fully paid	1,41,170
	6,29,20,770

(iv) Proposed location of the new undertaking : Backward area in Maharashtra, to be decided in consultation with the State Government.

(v) Brief outline of the cost of project, the scheme and source of finance :

Estimated cost of the project

		(Rs in lakhs)
1.	Land and site development ..	8.00
2.	Buildings	240.00
3.	Plant and Machinery.. ..	260.00
4.	Furniture and Office equipment	15.00
5.	Contingency and escalation ..	26.00
6.	Margin money for working capital	43.00
		592.00

Means of finance

		(Rs in lakhs)
1.	Internal resources	124.00
2.	Capital subsidy from Central Government (Pioneer Unit in a Notified backward area)	40.00
3.	Secured long-term and medium term loan from SICOM and all-India Financial Institution ..	428.00
		592.00

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this notices, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this 29th day of July, 1981.
Registered Office :
19, J. N. Heredia Marg,
Ballard Estate,
Bombay-400 038

VOLTAS LIMITED
V. M. PAREKH
Secretary

tive manoeuvres and actual business was negligible.

Export inquiries were few and far between while buying on account of DGS and D was limited. As a result, the volume of business remained small.

The fibre market was steady with W-5 grade jute held at Rs 281 per quintal for most part of the week. The fixation of a higher floor price for the current season aided sentiment of the market.

The Centre is studying the demand of the jute industry for granting cash subsidy on exports of jute goods, particularly carpetbacking cloth, as part of an integrated package of measures to bail out the industry firm its present glut.

A final decision on the issue is likely to be taken shortly, according to sources which said that cash compensatory support for CBC export is necessary since the manufacturing mills and merchant shippers are finding it difficult to sell the item in international markets because of the worldwide recession.

Even the reduced export registration prices of Rs. 6.300 a tonne for 7 ounce cloth and Rs 6.600 for the 6 ounce one has failed to attract buyers. The newly introduced lightweight 5.5 ounce cloth at Rs 6.300 a tonne has also not fared very well despite the fact that these floor prices are much lower than the average manufacturing cost of Rs 3.500 a tonne of CBC, industry sources said.

Meanwhile, there was serious disagreement between the jute mills on the one hand and the brokers, traders and the merchant shippers on the other at the board meeting of the East India Jute and Hessian Exchange Limited last week on the issue of minimum price for B-twills to ensure the mills of a higher price than that ruling at present. The trade by its greater strength on the board won the day defeating the mills.

Groundnut looks up

Bombay, July 21

Groundnut looked up in an otherwise quiet oilseeds market during the past week. This was because supplies from the g
rowing centres were fi
and firm advices. Karad b
Saurashtra bold and Sau
shtra quality improved by R
each to Rs 627, Rs 632
Rs 636 per 100 kg. Ground
oil scaled new peak at Rs
but declined to Rs 132.88
10 kg towards the end of
week. Restrictions on marg
in respect of millers, wh
salers and retailers by
Gujarat Government advers
affected the sentiment and
sulted in less supplies fr
Gujarat.

Most of the imported
dropped on slack demand
cause of the availability of c
tonseed refined oil. Palmol
was placed lower at Rs 14
against Rs 143.52 and soyab

I.T.C. LIMITED

The board of directors of I.T.C. Limited at a meeting held on 14th July 1981, decided to recommend to the shareholders at the 70th Annual General Meeting to be held on 27th August, 1981, the payment of a dividend for the year ended 31st March, 1981 of 16%-subject to tax, the turnover for the year ended 31st March, 1981 is Rs. 429 . 78. 03. 530 (1980- Rs.4. 55. 65. 46. 196.). The gross profit for the year ended 31st March 1981 is Rs. 13.75.73.277 (1980-Rs.13.61.09.274), the net profit for the year ended 31st March 1981 is Rs. 641.99.441 (1980-Rs. 5. 59. 71. 525) after deducting all charges and expenses and providing for taxation for the year amounting to Rs. 733.73.836 (1980-Rs. 8.01. 37.749). Development rebate written back amounts to Rs. 23.40.743 (1980-Rs. 10.30.815), and from the profits of the year the directors have recommended that Rs. 25.50.000 be deducted towards investment allowance reserve (1980-Rs.6.80.00) besides the other appropriations mentioned below :—

Capital reserve — Rs. 2.78.585 (1980-Rs.5.83.247)

General reserve—Rs. 19.050.799 (Rs.2..06.29.093)—(1980)

Debenture redemption reserve Rs. 10.00.000 (1980 Rs. 10.00.000)

The proposed dividend, if declared, will be payable on or after 18th September, 1981, to the shareholders whose names appear on the register of members of the company on 27th August, 1981. The register of members of the company will be closed from 18th August, 1981 to 27th August, 1981, both days inclusive. Share transfers received in order at the office of the company's registrars, CPA Consultancy Services (P) Ltd., 11 1A Sarojini Naidu Sarani (formerly Rawdon Street,) Calcutta 700 017, by 17th August, 1981, will be passed for payment of dividend to the transferees.

By Order of the Board
I.T.C. Limited

14th July, 1981.

Registered Office
Virginia House
37, Chowringhee,
Calcutta—71

N. K. Ghoshal
Secretary

HOYLE'S PAINTS LTD.

NOTICE

It is hereby notified for the information of the public that Hoyle's Paints Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for the production, supply, distribution or control of Varnishes including Insulated Varnish with proposed annual installed capacity of 100 M. Tonnes and estimated annual production of 1000 M. Tonnes. Other particulars of the proposed new undertaking are as under :

(i) Name of the proposed undertaking :
It will be an undertaking within the Company.

(ii) Name(s) of person(s) authority authorities proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking :

Hoyle's Paints Ltd.
Registered Office: 7, Council House Street, Calcutta-700 001.
Works : Konnagar, Hooghly (E. Rly.)
It is managed by the Board of Directors.

(iii) Capital Structure of the applicant person or authority and of the proposed undertaking :
Authorised : Rs. 50.00.000
Issued and subscribed : Rs. 10.00.000

(iv) Proposed location of the new undertaking :
State of Karnataka

(v) Brief outline of the cost of Project, the scheme and source of finance :
The estimated cost of the project is Rs. 88 lacs which is proposed to be financed by issue of fresh shares, Government subsidy and long term loans from Financial Institutions Banks.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi, within 14 days from the date of publication of this notice, intimating his views on the proposal and indicating the nature of his interest therein.

For HOYLE'S PAINTS LIMITED

P. R. SINGHVEE
Secretary and Chief Accountant

Dated : 14th July 1981

t Rs 141.50 against Rs 143.52 er 10 kg. BBD, however, oved up by Rs 3 to Rs 124.80.

Castorseed and its oils were uiet on account of slack de- and. Castorseed Madras mall declined by Rs 6.50 to s 318 and Kanpur bold by s 6 to Rs 310 per 100 kg. Cas- r commercial oil lost 50 paise t Rs 67.50 and BSS oil 25 aise at Rs 73.

Although activity was at a w ebb. Linseed bold rose by s 2 to Rs 480 per 100 kg and s oil by Rs 3.80 to Rs 125.50 er 10 kg.

Among cakes groundnut hardened by Rs 50 to Rs 2,000 per onne on account of limited upplies. De-oil, castor and ottonseed also finished on the lus side.

Comparative prices in rupees er quintal of seeds and per 10 g of oils:—

	18-7-1981	11-7-1981
nut		
Karad bold	627.00	624.00
nut oil	152.88	152.88
Cast. Md. Sm.	318.00	324.50
Cast. oil com.	67.50	68.00
Cast. oil BSS	73.00	73.25
Linseed bold	480.00	472.00
Linseed oil	125.50	121.00

Coarse grains steady

Bombay, July 20

A steady to better tendency featured trading in grains in the local market during the week under review.

In cereals, wheat hardened on limited supplies and good demand. The inflow of wheat was about 900 bags. The superior variety fetched Rs 300-340 per quintal, an increase of Rs 7 over the preceding week's level. The Saurashtra variety was traded Rs 3 higher at Rs 220-240 per quintal.

Activity in rice was restricted. Arrivals from the south amounted to seven wagon loads. Demand was moderate. Export demand for basmati was limited. The basmati variety was traded at Rs 450-600 per quintal and Surti kolam variety at Rs 340-400 per quintal showing no change over the week.

In coarse grains a steady trend was evident. Jowar ruled at Rs 185-225 per quintal and bajra at Rs 165-230 per quintal. Maize ruled at Rs 155-180 per quintal.

Among pulses tur dal gained by Rs 20 to Rs 500-600 per quintal. Gram declined marginally by a rupee at Rs 400-407 per quintal.

Sugar recedes

Bombay, July 20

Sugar prices displayed weakness due to heavy pressure of supplies amidst poor offtake. The price of sugar (C-30) declined sharply by Rs 31 to Rs 661-698 per quintal at the close of the week. The undertone was subdued as sellers anticipated a further fall in prices and stockists were keen on unloading. Sugar stocks with the city dealers were placed at 3,572 bags as against 2,230 bags in the preceding week. The price of sugar (C-30) on July 18, 1981 was lower by Rs 195 per quintal than on the corresponding date a year ago.

The State factories quoted both grades of sugar at Rs 565-575 per quintal as against the opening levels of Rs 625-640 per quintal and Rs 625-634 per quintal respectively.

Khandsari was quoted in the range of Rs 475-525 per quintal as compared to last week's level of Rs 500-580 per quintal.

Gold erratic, silver up

Bombay, July 20

An erratic tendency in gold and an uptrend in silver marked the trading in the Bombay bullion market during the past week.

Standard mint gold opened at Rs 1,685 per 10 gms and after declining to the week's low of Rs 1,660 per 10 gms firmed up to Rs 1,675 per 10 gms before finally closing at Rs 1,670 per 10 gms. Ready silver (.999 fineness) opened at Rs 2,325 per kg and after dropping to Rs 2,350 per kg on one day maintained the uptrend and was finally placed at Rs 2,460 per kg.

Money comfortable

Bombay, July 20

Conditions continued to be comfortable in the Bombay short-term money market during the past week. Both notified and commercial funds opened at eight per cent went on declining to three per cent on Friday (July 17). The rates, however, hardened subsequently to 8.5 per cent before finally closing at eight per cent.

Spurt in aggregate deposits

Bombay, July 20

Aggregate deposits of scheduled commercial banks spurted by Rs 233.29 crores to Rs 40,402.02 crores during the week ended July 10, 1981. Bank credit expanded by Rs 42.59 crores to Rs 26,598.37 crores. The balances of banks with the RBI went up by Rs 106.58 crores to Rs 4,504.37 crores and their borowings from the RBI increased by Rs 2.19 crores to Rs 572.23 crores.

MUKAND IRON & STEEL WORKS LTD.

NOTICE

It is hereby notified for the information of the public that MUKAND IRON & STEEL WORKS LIMITED proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi under sub-section (2) of Section 22 of The Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for the production, supply, distribution or control of :

Item of manufacture	Capacity
SPONGE IRON	200,000 tonnes per annum.

Other particulars of the proposed new undertaking are as under :

(i) Name of the proposed undertaking	The proposed undertaking will be a part of Mukand Iron & Steel Works Ltd.
(ii) Name(s) of person(s) or authority authorities proposing to establish the new undertaking. Where it is a body corporate further details of its management structure together with those of the proposed undertaking	Mukand Iron & Steel Works Ltd. The Board of Directors consists of : 1. Shri Viren J. Shah, M.P. Chairman & Managing Director 2. Shri Ramkrishna Bajaj Vice-Chairman 3. Shri Rasiklal J. Chinai 4. Shri D. S. Mulla 5. Shri J. P. Thacker 6. Shri D. S. Joshi ICS (Retd) 7. Shri N. K. Shinkar 8. Shri Rahulkumar Bajaj 9. Shri D.S. Mehta 10. Shri B. C. Randeria
(iii) Capital structure of the applicant undertaking and of the proposed undertaking	Authorised Capital Rs 12 50 00 000 Subscribed Capital : Rs 8 07 43 637
(iv) Proposed location of the new undertaking	Warora, a backward area in the Dist. Chandrapur, State of Maharashtra.
(v) Brief outline of the cost of the project, the scheme and source of finance	The cost of the project is approximately Rs 30 crores. The project will be financed partly by borrowings from Financial Institutions and part by from internal accruals.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated : July 27, 1981

P. C. CHHAJLANI
SECRETARY

Registered Office :
Lal Bahadur Shastri Marg, Kurla,
Bombay 400 070

Beyond headlines

Financial autonomy for states

By I. SATYA SUNDARAM

A GENUINE gravamen of the states is that they do not enjoy financial independence under the present Centre-state financial relations as they are made to depend more and more on the Centre. The various Finance Commissions have naturally recommended for larger transfer of financial resources from the Centre to the states in tune with the growing financial commitments of the latter. In fact, one of the objectives of devolution was to ensure greater flow of financial resources to those states which are relatively backward.

The states' responsibilities are growing but the funds available to them are neither adequate nor elastic. Hence, the growing indebtedness of the states to the Centre. The overdrafts from the Reserve Bank of India continue to be a bone of contention and the Centre's refusal to permit overdrafts is resented by the states. Moreover, foreign aid and deficit financing are both in the Centre's sphere. In addition to this, the Centre also enjoys exclusive rights in respect of foreign trade, foreign exchange, banks and insurance. Thus, the Centre is in a very advantageous position *vis-a-vis* the states. No wonder, the states' overdrafts which were only Rs 23 crores in 1963-64 rose to Rs 430 crores in 1976-77.

The various Finance Commissions have been trying to remove the financial imbalances between the Centre and the states and among the states themselves by not only enlarging the divisible pool but by evolving appropriate criteria to determine the due share of each state. For instance, the state's share in the net proceeds of income tax was only 50 per cent before the appointment of First Finance Commission, but the Seventh Finance Commission raised it to 85 per cent. However, in determining the share of each state, population factor was given undue importance (about 80 per cent weightage) by various Finance Commissions. This arrangement is not likely to help remove the economic backwardness of states since some states do enjoy a higher per capita income in spite of larger population than others. Therefore, the Seventh Finance Commission in respect of state's share in union excise duties raised the percentage from 20 to 40. Regarding the criteria for distributing among the states, it gave equal weightage of 25 per cent to each of the four factors, namely, the population of the state in 1971, the inverse of per capita state domestic product multiplied by the projected population of the state as on March 1, 1976, the percentage of the poor in the total population of each state and a formula of revenue equalisation worked out by the Commission.

The states' debt to the Centre which was Rs 445 crores in 1951-52 increased to Rs 5,519 crores in 1965-66 and was as high as Rs 13,591 crores in 1975-76. It was around Rs 18,786 crores at the end of March 1979. The Central loans accounted for 53.7 per cent of the total debt of the states in 1951-52. The proportion increased to 74.1 per cent in 1970-71 and slightly declined to 70.8 per cent in 1976-77. Total debt servicing charges including repayment of central loans was only Rs 21 crores in 1951-52. but increased to Rs 251 crores in 1960-61 and rose as high as to Rs 1,615 crores in 1976-77. These charges accounted for 9 per cent of the total tax revenue in 1950-51, which increased to 60 per cent in 1960-61 and to 78 per cent in 1976-77. Thus, three-fourths of the tax revenue has to be diverted to maintain the solvency of the states. In certain states the debt charges were more than their tax revenue which means that repayment of Central loans is made out of fresh loans.

No doubt, the terms of loans and the interest charges are liberal. Yet, states' indebtedness is growing. Writing off a portion of the debt or postponing repayment or rescheduling the debt will not solve the problem. If old loans are cancelled, the states are likely to become reckless in their demand for and use of loans. If they depend too much on money market, it may be dried up, starving the other sectors of the economy.

The states are by and large happy over the recommendations of the Seventh Finance Commission as it provided debt relief of varying degrees to the states amounting to about Rs 2,156 crores. They would also get additional Rs 2,000 crores a year on average for five years from the Central resources. The devolution to the states will be of the order of about Rs 21,000 crores during 1979-84 as against a little more than Rs 11,000 crores in the previous five years. In addition, statutory grants-in-aid of Rs 1,173 crores will also be given to eight states. Besides, the Commission has also recommended separate grants-in-aid of Rs 437 crores for upgrading the standards of administration.

Since the basic objective of transfer of resources from the Centre to the states is to reduce disparities in development among states, per capita income should be the sole criterion as it reflects economic backwardness. Towards better financial autonomy for states, it is suggested that the Centre's net proceeds of income tax be distributed among the states and the union territories, that the sharing of union excise duties with the states should be compulsory and that surcharge on income tax, corporation tax and customs duties should also be brought under the divisible pool as revenues from these sources have shown significant increase.

It is unfortunate that the states are unwilling to mobilise additional resources from the sources available to them. They must concentrate on taxes like betterment levy, better administration of present taxes like sales tax and quick recovery of tax arrears, economy in their expenditure, particularly unproductive expenditure and proper investment of loans obtained from the Centre. It is suggested that the Finance Commission has to evolve a certain mechanism by which states which mobilise additional resources are made eligible for larger share in the resources of the Centre.

While the states urge for larger share in the Centre's resources, they do not properly manage the projects under their control. For instance, gross receipts from irrigation are currently insufficient to clear even working expenses. The Sixth Plan 'Framework' observed that if irrigation rates are adjusted to cover only working expenses, the states can save nearly Rs 400 crores over the five year period. As it is, the losses on minor irrigation alone during the year 1978-79 were of the order of Rs 65 crores in 20 states. The commercial losses of states electricity boards increased from Rs 103 crores in 1973-74 to Rs 418 crores in 1979-80. The aggregate loss of state road transport corporations during 1979-80 was Rs 62.35 crores. The states obviously cannot hope to enjoy financial autonomy unless they fully exploit the sources of revenue available to them. Ensuring financial autonomy for states is the collective responsibility of the Centre and the states.

Mr Satya Sundaram is a lecturer in the Hindu College, Machilipatnam.

COMMERCE

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PEOPLE

Reporter

Mr B. N. Reporter has been re-elected president of the Indian Roads and Transport Development Association (IRTDA) for a further term of one year. Mr Reporter is the joint managing director of the Associated Cement Companies Ltd and he brings to his office varied experience in both the road and transport industries. IRTDA, one of the oldest and largest associations in the country, has made effective suggestions for improving the transport industry.

Khandekar

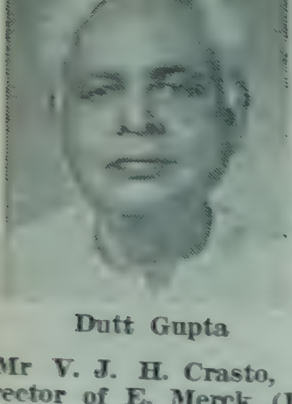
Mr S. M. Khandekar has been elected president of the Indian Pump Manufacturers Association. Mr Khandekar, who is vice-president (marketing) with Kirloskar Brothers Ltd, Pune, is also the chairman of the export committee and a member of the technical committee of the IPMA and an executive member of the Valves Manufacturers Association. Besides, he has been a member of several high power delegations to various countries.

Mr J. Sengupta has been appointed director of Chloride International Ltd of the UK.

Mr J. S. Bakshi has been appointed director (finance) of Indian Petrochemicals Corporation Ltd.

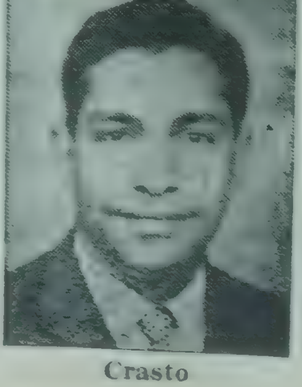
Ramanathan

Mr R. M. Ramanathan has been elected president of the Madras Stock Exchange for the year 1981-82. Mr S. Ramaswami was elected vice-president.



Dutt Gupta

Mr Hirendra Nath Dutt Gupta has been elected president of the Bengal National Chamber of Commerce and Industry for the current year. Mr Dutt Gupta is the managing director of East India Pharmaceutical Works Ltd and has been previously the president of the Organisation of Pharmaceutical Producers of India (OPPI). He is presently associated with a number of pharmaceutical and chemical organisations and institutes in India.



Crasto

Mr V. J. H. Crasto, managing director of E. Merck (India) Ltd has been invited to join the supervisory board of P. T. Merck Indonesia, Jakarta. Mr Crasto, who started his career in 1950, held several managerial positions before he became the founder-director of E. Merck (India) in 1967. He became managing director of the company in 1974. The invitation to join the supervisory board of the Indonesian company speaks of the recognition of Indian managerial talent by German principals of E. Merck.

THE WEEK

The ordinance on maintenance of essential ser vices, which bans strikes and would also cover lockout and lay-offs when presented to the Lok Sabha fo ratification in the next session of Parliament, has bee welcomed by labour ministers of most states excep Kerala and West Bengal. The Supreme Court ha dismissed two writ petitions challenging the ordinance

★

A study by the Federation of Indian Chambers of Commerce and Industry has indicated a shortfall of ten million tonnes in the targets of capacit increase in key basic industries like cement, fertilisers, steel and manmade fabrics during the Sixth Plan period.

★

Coal production in the country appears to be rising with July output of 9.23 million tonnes showing 12 per cent increase over the 8.24 million tonnes produced in the same month last year.

★

The Maharashtra Government has announced its intention to increase the minimum daily wages for bidi workers from the present Rs 4.75 per 1,000 bidis to Rs 7 to Rs 10 per thousand bidis depending on the bidi zones.

★

Power generation in the country is said to have improved by 17 per cent to 39,951 million units in the first four months (April-July) of 1981-82 compared with the figures in the same period of 1980-81 and crossed the target for the period by 500 million units. The rise is ascribed to improved thermal sector performance.

★

Minerals and Metals Trading Corporation of India has increased lead prices to Rs 13,000-13,100 per tonne, tin price to Rs 195,000 and nickel price to Rs 94,000 a tonne effective August 1 from Rs 11,000-11,100; Rs 180,000; and Rs 90,000 a tonne previously.

★

Wholesale price index

At 284.6, the latest available wholesale price index for the week ended July 11, 1981 showed a rise of 1.8 per cent over the preceding week and 10.7 per cent over the year.

Money comfortable

Conditions in the local short-term money market were comfortable as of Monday (July 27). Both notified and commercial funds were renewed at 6 per cent. Fresh money was transacted at 5 per cent and 4½ per cent. The market closed at 4½ per cent.

COMMERCE

Edible oil: Now a luxury!

EDIBLE oils are experiencing a run-away boom. Groundnut oil has risen in Bombay to over Rs 157 per 10 kg, an all-time peak, sesame to Rs 135-Rs 141 and cottonseed oil Rs 133-137; imported oils such as palmoleine, refined soyabean and RBD palm oil have also taken sharp jumps. In the retail market consumers have to pay a still higher price with groundnut oil costing Rs 17 per kg and refined Rs 22 per kg. Day-by-day this basic necessity is going beyond the reach of even the upper middle class, not to speak of the lower middle class and working classes despite heavy imports at annual cost of over Rs 700 crores. The onset of the monsoon and reports that production of oilseeds this year may be one million tonnes higher than the figure of 10.2 million tonnes in 1980-81 should have softened the prices somewhat but the market behaviour is contrary to expectations and an immediate reversal in the trend of prices is not in sight.

Marketmen trace this unprecedented advance in oil prices to several factors. It is said that farmers are holding back whatever stocks with them in the expectation of a further rise in prices and thereby have created a shortage in floating stock. Secondly, the policy pursued in Gujarat, the single largest groundnut producing area in the country, by the State Government of fixing margins for millers, wholesalers and retailers has almost paralysed the oil industry. Many doubt whether the State Government will be able to enforce such a policy, only creating in the process a shortage of groundnut oil. The recent hike in effective customs duty to 150 per ent on oils imported by the private trade has also ontributed to the rise. The Government increased the duty with the intention of mopping the huge profit that he trade made but the reports that the trade would ry to cancel the contracts for oils that are not on high eas or reached the ports have created a psychology of hortage thus helping the price rise. It may be noted hat the bulk of the canalised imports of oils through he STC go to the vanaspati industry. The picture about rivate trade oil imports is not clear but reports were hat ships with over 14,000 tonnes of oil ordered by he trade have already reached ports and another 16,000 onnes are on the high seas. To add to all the public istribution system is virtually inoperative as far as dible oils are concerned and reports persist that oils rom fair price shops find their way into the open market.

If the public distribution system has failed in egard to edible oils, we have not had also a green revolution in oilseeds such as was witnessed in wheat. There was a deterioration in the yields till the mid-1960s as compared to the 1930s and 1940s. Though in the subsequent 15 years there has been some recovery in yields, these, in the case of groundnut, sesame and linseed are below their average yields in 1930s and the yield of rapeseed and mustard is only about 20 per cent higher than in 1930s. As against a yield of 1,000 kg per hectare in 1930s the average yield in the case of groundnut, the most important oilseed, in 1976-79 was only 830 kg. If however the groundnut production has increased from 2.91 million tonnes in 1930s to 5.90 million tonnes during 1976-79 it was because the area under groundnut cultivation had seen a sharp step-up from 2.90 million hectares to 7.19 million hectares or 47 per cent of the area under major oilseeds. Edible oilseeds output has been stagnant, nay, fluctuated widely in the decade ending in 1978-79 between as low a figure of 6.5 million tonnes in 1972-73 to 9.1 million tonnes in 1978-79. The Sixth Plan document traces this to the fact that only eight per cent of the total area under oilseeds is irrigated and further a substantial part of rain-fed area under oilseeds is marginal land. Poor post-harvest technology including deficiency in marketing support and storage and processing arrangements also, the document says, have adverse effect on returns to growers and incentives for production.

The problems of a strategy for increasing oilseeds production have not been identified by the Planning Commission now. These factors were known before and even in 1977 an inter-ministerial group had suggested short-term and long-term measures to increase oilseeds production. Among the long-term measures recommended by the group were increase in irrigated areas in groundnut, specially in the command areas of Nagarjunasagar, Tungabhadra, Ghataprabha, Hirakud and areas under Rajasthan and Bhakra Nangal projects, and an intensive sesame development programme in the major sesame-growing areas. The group had also recommended short-term loans by the state government to farmers to enable them to increase fertiliser use, seed production and distribution programmes to be taken up by the National Seeds Corporation in co-operation with the State Seeds Corporation and State Farms Corporation of India and an encouragement for greater cultivation of soyabean and sunflower through developing adequate support for them.

The programme and the implementation of these recommendations has been uneven, if not tardy. It is stated that as a result of campaign launched in the irrigation command areas during 1979-80, summer groundnut area increased to about eight lakh hectares against 5.5 lakh hectares in 1977-78 and the Sixth Plan promises efforts to be made to raise irrigated summer groundnut area to 14 lakh hectares. It also talks of a production strategy for oilseeds like groundnut and mustard involving launching of an integrated oilseeds yield maximisation programme with emphasis on production and distribution of improved seeds, popularising application of fertilisers, specially phosphatic fertilisers to groundnut and soyabean crops, adoption of adequate and timely plant protection measures on an area basis, inclusion of oilseeds crop in irrigated crop rotations expansion of area under non-traditional crops like soyabean and sunflowers and demonstration of improved practices. And all this is expected to yield 11 million tonnes of five major oilseeds in the year 1984-85. It is not clear how with such a low target imports of edible oils can be avoided considering that even in the current year a production of 102 lakh tonnes is expected. A more intensified oilseeds development programme is called for that will increase the yield of groundnut and sesame and linseeds to at least the average of 1930s and raise further the yield of the rapeseed and mustard. Lack of ready markets has hindered the progress of production and non-traditional and new varieties of oilseeds. Soyabean and sunflower are known to give better yield and oil-content and their cultivation must be encouraged by popularising them and ensuring a fair price for them. Otherwise their anticipated production of 20 lakh tonnes will prove a paper scheme.

Pick-up in industrial production

AT a time when the country's foreign exchange reserves are dwindling by more than Rs 100 crores a month because of the widening foreign trade deficit, the news of recovery on the industrial front from the slidedown of 1979 and 1980 should provide cheers. According to the latest available data released by the Central Statistical Organisation, industrial production during the first four months (January-April) of 1981 increased by as much as 9.7 per cent over the corresponding period of 1980. This position seems to have further improved in that according to the estimates made by the *Commerce Research Bureau* during the first half (January-June) of 1981 the rise in industrial production was 11.3 per cent over that in the corresponding period of last year. Viewed in the context of the fact that industrial production had recorded a fall of about 3 per cent in the first half of 1980 and had increased by less than one per cent during the whole of 1980, the recent uptrend is a very encouraging development.

Analysis made by *Commerce Research Bureau* indicates a definite improvement in large number of industries (with a combined weight of nearly 42 per cent in the index of industrial production) during recent months. Only two industries, namely, cotton fabrics and tea (with a combined weight of about 8 per cent) recorded declines. Among the industries which recorded a rise during the first half of 1981 are: aluminium (37 per cent); automobiles (36 per cent); sugar (33 per cent); saleable steel (20 per cent); mining and quarrying (18 per cent) and cement (14 per cent). If these trends continued in the later half of 1981, industrial production was likely to achieve the targeted growth of 8-10 per cent during 1981. While this would certainly be above the long-term growth rate of about six per cent in industrial production, it should not give rise to any complacency as it comes, by and large, in the wake of below-normal growth of last two years.

The recovery on the industrial front was partly a result of improvement in the availability of infrastructure facilities. For example, power generation during the first seven months of 1981 increased by as much as 15 per cent. Following this improvement Tamil Nadu lifted all the power restrictions imposed earlier. Assam, Haryana and Punjab also lifted energy cuts but for restrictions on industries on peak period demand. It was reported that six infrastructure industries, namely electricity, coal, saleable steel, petroleum refinery products, crude petroleum and cement (accounting for a combined weight of 23 per cent in the index of industrial production) showed an overall rise of 23 per cent in production in June 1981 over June 1980. Improved infrastructure facilities had resulted in a sizeable coking coal stock of nearly 5 lakh tonnes with the steel plants in the middle of July as compared with 1.1 lakh tonnes at the end of July 1980 and only 65,000 tonnes in September 1980.

The cabinet sub-committee on infrastructure, headed by the Union Finance Minister, Mr R. Venkataraman, periodically meets to suggest ways of removing bottlenecks. The recent government decision to undertake a quarterly review of select public sector units is also expected to help in nursing back the ailing public sector undertakings to health. Of course, if we expect these units to maximise their capacity utilisation and deliver the goods, they should also be given some autonomy of operation. The Government has also assumed powers to ban strikes in essential services and industries and clarified that lay-offs and lockouts by the management would also be banned. While this in itself cannot ensure the rise in productivity of workers, the continued improvement in the availability of power and raw materials would help boost industrial production, if there is no other interruption in this productive process. Further, if industrial peace in to be ensured the workers need to be protected from the fury of ever-rising prices. This becomes all the more important now that the Government has banned strikes and rightly too.

Tea's travails

THE New Delhi meeting of the tea producers, the state governments concerned and the Central Government officials like the Tea Board chairman and the secretary to the Union Commerce Ministry would have achieved something if the Government of India could sympathetically listen to some of the longstanding grievances and take prompt remedial measures to help the industry ride out its current crisis. Not that the Government is unware of the pressing problems—most of them have arisen from the rather indifferent manner in which the industry's representations and pleadings have been treated—but in the context of a national conference which was called to discuss the problems specifically and in precise and concrete terms, New Delhi's approach should have inspired greater confidence in the industry than before.

Multiple rates of taxation, both on sales and income, have created a number of difficulties for the industry in terms of needless paper or clerical work in one case, and a complete erosion of financial resources in another. Taking the example of sales tax first; in Calcutta and Siliguri different rates apply; they range from 1 to 3 per cent. At Cochin, sales tax is levied 5 per cent *ad valorem* and a surcharge of the same order is imposed when turnover goes above a certain limit—and when the turnover exceeds Rs 10 lakhs, the surcharge rises to as much as 8 per cent. At Coonoor and Coimbatore, the rate is 5 per cent single point. Only in Gauhati there is no sales tax yet, perhaps the Government wants more tea to come to the auctions there, but the tea auctioned at Gauhati is still a small part of the country's total output and makes no difference to the industry's worries on account of the multiple rates sales tax enforced at the auctions. For the exporters and the packeteers different sales tax rates at different auctions could be a headache in controlling their costs and fixing their prices. According to one expert, the incidence of sales tax on an average tea price of Rs 14 a kilogram is 14 to 42 per cent at Calcutta and Siliguri, and as high as 70 to 73 per cent at Cochin, Coimbatore and Coonoor. It is high time a measure of rationalisation in this matter was attempted. The state governments do need revenue, but the country needs the tea industry for employment and exports.

The same can be said about the corporate levy and the agricultural income tax inposed by the Centre and the states respectively. The total incidence of these taxes works out to much a higher figure than the level of corporate taxation on industry as a whole. Some state governments, not content with the existing rates of levy now want to impose agricultural income tax on cent per cent of the tea industry's income. If the industry is to pay 40 per cent corporate tax as well, then it would amount to a taxation of 140 per cent of the income. It would than simply become taxation of capital.

One reason which may have prompted the states to enhance their agricultural income levies on the industry is the high level of prosperity which tea enjoyed from 1975 onwards, until early last year. The industry, of course, still has its own share of people who make the quick buck as traders, brokers or auctioneers, but the industry's economic condition generally is no longer that prosperous as it was only two years ago. Indeed the industry has been overtaken by a serious crisis, firstly due to an oversupply situation in the world markets. That situation has kept down the rates at the London auctions which are still the barometer of world tea prices, and have thereby been influencing auction prices in the producing countries steadily downwards. Even in India, where the internal market is already absorbing more than 60 per cent of the output, auction prices have been ruling fairly low because of the adverse international trend. They are so low that for the majority of the gardens, the auction realisation is said to be below their costs today and costs are likely to escalate further because of higher prices for the petroleum products, fertilisers, coal and other essential inputs they use. It is worth investigating of course how much of the so-called production cost is on account of the top heavy nature of most of the large tea companies or groups, and their various devious accounting procedures, but there is no denying the fact that a good deal of rising costs is on account of the ever increasing wage bill and welfare burdens that the industry has felt compelled to shoulder.

Since wage increases for labour cannot be postponed because of the inflationary conditions in the economy and the recent rise in food prices, the industry can be saved only by suitable and imaginative fiscal concessions. If the press reports that the Centre is considering a single levy in the place of the state agricultural income tax and the usual corporation tax are correct, then a step in the right direction is being considered. As for the sales tax imposed by the state governments, the same approach is called for. There is yet another problem—that of providing adequate bank funds for the industry's working capital needs. The old norms laid down by the Dutt Committee are already irrelevant, and the Chore Committee's recommendations should not be applied to the tea industry at this stage. Since the Government has already withdrawn the export duty it is not clear what further help or incentives can be now offered for bulk tea exports, but packet tea or tea exports in value added form should be given a greater measure of subsidy if and when circumstances so requires.

LETTER FROM LONDON

Industrial competitiveness improves

FRANK BROADWAY

LONDON

THE competitiveness of British industry is now showing distinct signs of improvement, with the drastic rationalisation undertaken by many companies beginning to work through into productivity. The Bank of England recently estimated that output per man-hour in Britain rose by 2.5 per cent between the first quarters of 1980 and 1981, while there was no change in productivity in competitor nations. With a moderate level of wage settlements in manufacturing industry, and the decline in the value of the pound against the US dollar in recent months, the Confederation of British Industry (CBI) calculates that unit labour costs in Britain have fallen by over six per cent relative to other major industrial nations since the first quarter of this year.

Both the Government and CBI are insisting that the downward trend in wage settlements must continue in the next pay round, which starts in the autumn. The trade unions are naturally resisting the idea, but there are reasonable hopes of securing a level of settlements around half the 10 to 11 per cent seen in manufacturing industry at the present time. If this happens, and the potential for productivity increases, which has resulted from massive redundancies and better working practices, is realised as output recovers, British industry could show a major increase in competitiveness during the next 12 months.

Moderation in wage settlements will be helped if, as expected, the annual rate of inflation in Britain continues to fall. In May it fell again—to 11.7 per cent. The fall in sterling against the dollar now implies higher costs for imported materials which will work their way through to retail prices in six to twelve months time. However, between May and June the price index for materials and fuel bought by manufacturing industry rose by just 1½ per cent and this surprised many economic pundits who had forecast an increase of 2 to 3½ per cent.

Prices held down

Nearly two thirds of the rise was a result of the higher sterling price for crude oil caused by the recent depreciation of sterling, but this increase was partly offset by a reduction in the price of North Sea oil—a factor that has been left out of the equation by many experts. The North Sea provides about half Britain's supplies of crude oil and the recent ten per cent price reduction is bound to ease manufacturers' costs.

Certainly as far as output, or "factory gate" prices are concerned manufacturers are being forced to hold down their prices and it is retailers who are calling the tune. They realise that if demand is to be kept buoyant when unemployment is high and wage rises are low, prices must be kept down—and manufacturers are forced by competitive pressures to fall in line.

While control of inflation remains the top priority concern about unemployment is a close second with particular attention being paid to young people. A total of £1,300 million is being spent this year on the Government's special measures to combat high unemployment and maintain training levels. Some £1,000 million is for the special employment measures —about a third of which helps unemployed youngsters in Training Courses and Work Experience Schemes under the Youth Opportunities Programme, and a further £300 million will pay for training over 100,000 adults and young people.

Ministers have increased the size of the Youth Opportunities Programme from 360,000 places last year to 450,000 places this year and are considering the Manpower Services Commission's request for a further 100,000 places. The intention is that no one should leave the Programme without acquiring some of the basic skills needed to compete in the jobs market. It is also hoped to have a network of opportunities provided for the training and re-training of adults at several points in their working lives.

All these moves are designed to ensure that as the country moves out of recession the recovery does not grind to a halt because of lack of skills. Fortunately the rate of increase in adult unemployment continues to slacken. On a seasonally adjusted basis, the increase in June was 37,800, the lowest monthly rise since March 1980. All the statistical evidence now suggests that the recession has "bottomed out" but economic recovery has yet to begin.

Sterling under pressure

There is a certain irony in the fact that sterling should be under pressure just when the economy is improving. Sterling's strength had persisted despite a higher than average inflation rate in Britain and repeated warnings by Economic Ministers that Britain faced serious problems which would take the better part of a decade to solve.

But to a significant extent the recent fall in the pound represents an overdue adjustment to more realistic levels. This is doubtless a major reason why the Government has made no attempt to defend the pound by raising interest rates or prompting large scale Bank of England intervention in foreign exchange markets.

In addition, there is no reason to expect the current exchange rates to last indefinitely. Logic suggests that European currencies, including the pound, may rise against the dollar when American interest rates eventually fall, but the pound could decline further against the European currencies to reflect changes in competitiveness during the last few years.

Whatever happens the productivity and other improvements now taking place in British industry will be crucial to overall economic success.

EDITOR'S NOTEBOOK

Vadilal Dagli

WHILE gold prices have dropped from $850 an ounce in January 1980 to around $392 an ounce in the first week of August, the drop in silver prices is more dramatic. Silver which was quoted at $50 an ounce in January last year has now retreated to as low a figure as $8.25 an ounce. Like gold, silver was also considered to be a good investment in an inflationary situation when the dollar was going down and prices in America and the West European countries were rising. Now the American inflation rate is brought under some control and the dollar has been riding high as it has not done during the past two decades. So speculators have found that it is better to invest in dollar securities rather than in silver and gold. Big speculators like the Hunt brothers had cornered silver in fantastic deals in which millions of dollars were involved. But now gold and silver are fast becoming the commoners among metals.

There is also depressing news for silver hoarders. Recently the American Congress approved the sale of 105 million ounces of silver between 1982 and 1984 from the stockpile of the United States Government. Of course, the American Senate has put a rider. It says that sales cannot be made from the government stockpile if such sales disrupt the market. The price of silver has been falling rapidly, but if American Government finds the selling of silver is a profitable proposition, they may jolly well not care for any market. According to the time table, nearly 46.5 million ounces of silver will be sold in 1982, 44.7 million ounces in 1983 and 13.9 million ounces in 1984. There is also a stipulation that the silver which is not sold in its designated year (for instance 46.5 million ounces in 1982) cannot be sold the next year. Unsold silver must be returned to the US Government stockpile. So from January 1982 American Government would be selling silver at the rate of one million ounces a week. Whether such a sale would disrupt the market or not is a question that has to be decided by the US Government only. Why did America decide to sell as much as 105 million ounces of silver? The Reagan Administration thought that the sale of silver would help it to raise money for mounting defence expenditure. The American Government has also decided to buy new stockpile materials valued at about $550 million along with the sale of silver. What commodities America will buy has been kept a secret. But the news that after a few months America would start selling silver has itself had a tremendous bearish impact on the world silver markets.

What would be the impact on India of the crash in silver prices? As silver prices have been falling steadily over the past 20 months the price difference between the London and Bombay markets has been increasingly diminishing. On June 26 the price of silver in Bommay market was Rs 2,415 per kg as against Rs 2,601 per kg in London (a difference of Rs 186). But about a month later, on July 27, silver price in Bombay was Rs 2,520 a kg while in London it slumped to Rs 2,432 a kg; in other words the London price for the first time was lower by Rs 88 per kg as compared to the Bombay price. When the price difference was advantageous to smugglers they were buying gold and smuggling it into the country for which they were paying in terms of silver. Now because of the steady fall of gold prices in the world markets there is an advantage of Rs 520 per 10 grams of gold to smugglers who want to bring gold into India. This is why smugglers will still take silver out of India and bring gold into the country.

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POLAND is civilising communism which is based on the dictatorship of the communist party and the few chosen members of the Politbureau. Recently the Politbureau was elected by secret ballot in Poland which is a major breakthrough in the matter of internal democracy in the working of the communist parties of the world. Poland made history again when on July 21 that country's communist-controlled parliament passed a bill that relaxed censorship. Freedom of speech and publication and broadcast is completely wiped out in communist societies. Till recently, the poems of Poland's Nobel Prize winning poet Czeslaw were not allowed to be published in Poland. But the workers revolted not only for more bread but also for establishing a tolerably truthful press, radio and TV. Though the July 31 law does not permit freedom of the press, radio and TV, publishing, theatre and cinema as we normally understand, it states in great detail what may and may not be published or broadcast. It does retain prior censorship. But the law restricts the censor's powers and has set up a system of appeal. One member of parliament described the censorship of the past as "a harmful corner of our history". The new law, however, prohibits criticism of Poland's alliance with the Soviet Union. But that restriction is necessary to avoid the Soviet tanks marching into the streets of Warsaw.

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THE only heroism one would like to salute is the heroism of a person who would continue to be consistently creative and socially useful in the face of certain death. Prof Aniruddh Brahmabhatt who died at the age of 43 on July 31 at Ahmedabad was such a heroic soul. Aniruddh was an outstanding critic and essayist who also wrote verse. About six years ago he was afflicted with the horrifying disease of blood cancer. While his friends were worried about the almost certain departure of a versatile writer, Aniruddh, who taught at the Gujarat university, worked as if he had been suffering from a mild ailment. His creative will was not paralysed by the spectre of death. He went on writing delightful biographical essays, literary criticism and reflective philosphical articles. He also wrote regularly two columns a week for the well-known Gujarati daily, *Mumbai Samachar*. A week before he died, he had posted the last piece of his column. He stopped writing only when he lost vision and the power of hearing a few days before he died. Aniruddh was perhaps the most serious practitioner of the art of literary criticism among the younger generation of Gujarati writers. The tradition that the great critic Ramanarayan Pathak had started in the field of criticism was carried further by Aniruddh. Aniruddh had translated Aristotle's work on poetics. This was followed by his own original work of criticism *Anviksha* (close assessment) which singled him out as a critic who synthesised Indian and Western aesthetic heritage. His biographical essays *Nam-rup* (names and forms) is a major contribution in this seemingly simple but difficult genre. The way Aniruddh grappled with death could be a theme of a major poem.

COVER STORY

Opportunities for joint ventures in Africa

By **PRIYA V. MUTALIK-DESAI**

TODAY the developing countries are restless to usher in the New International Economic Order (NIEO) with a view to restructuring the world economy and evolving a new framework which can ameliorate the ills of the present structure and strengthen their bargaining position. Though there is growing awareness that this co-operative endeavour would require global effort, greater significance than ever before is attached to the concept and imperatives of Economic Co-operation among Developing Countries (ECDC) and Technical Co-operation among Developing Countries (TCDC). Simultaneously, a general impression is gaining ground that India is well-poised in terms of industrial advance, supported by the development of indigenous and autonomous technological capability, to effectively assist in this process within the framework of collective self-reliance.

The scientific and technological progress achieved by India while accelerating the pace of building industrial India of today has also aroused the expectations of the rest of the developing world regarding India's participation in their industrial development programmes. A view is gaining currency that India's industrial experience should not only provide guidelines for other developing countries' industrialisation programmes but that she should share also her expertise and management in similar ventures in these countries. In fact, an increasing flow of visiting dignitaries, diplomats, industrialists and business delegations, government officials as well as student and trainee technicians are carrying back optimistic messages of the achievements of India and suggesting instrumentalities to strengthen the bonds of co-operative action for mutual benefits.

A large number of economic, technical and scientific co-operation agreements with the countries of Africa, Asia and Latin America is a sequel and manifestation of this new consciousness regarding the concept of international co-responsibility and interdependence. It is in this light that it would be instructive to discuss the role and experiences of Indian industrialists in some of the African countries. It is important to note that recently there has again been a revival in the interest in setting up ventures in some of the African countries.

Abundant natural resources

It is well known that the continent of Africa has considerable natural resources. It possesses about one-third of the known and explorable hydroelectric potential and about 10 per cent of known petroleum reserves in addition to having good prospects of solar, thermal, tidal and geo-thermic energy. Additionally, the region is endowed with good mineral resources, such as gold, uranium, copper, diamonds, phosphate, coal, lead ore, zinc and accounts for about one-third of the total value of world mineral output. The present scramble for Africa is closely related to the exploitation of these potential resources as well as the capturing of the markets to unload the manufactured goods. All this also makes Africa the continent of future. India which has enjoyed close commercial and cultural ties with some African countries has never been a party to this scramble specially because of its own colonial experience, lack of super-power ambitions, its own problems of development and also due to its support to the liberation movements in Africa, its prominent role in the non-alignment movement and the peaceful character of its political relations with the rest of the world.

In keeping with this strategy, India's endeavour has been to play a constructive role in African countries through export promotion, joint business ventures and technical assistance programmes. India's contacts with African countries date to early times and Indian industrialists is not a new phenomenon to a majority of African countries. At the beginning of the century, Indians role in that part of the world was fully recognised and appreciated. Sir Harry Johnson had observed, 'to the British Indians I can only wish unlimited success since they increase trade first in a small way and then in a large way where no trade has hitherto existed'. Winston Churchill paid high compliments to Indians when in 1908 he said, 'it is the Indian trader who penetrating and maintaining himself in all sorts of places to which no white man would go or in which no white man could earn a living has more than anyone else developed the beginnings of early trade and opened up the first slender means of communication'.

This commendable role played by Indian was overshadowed in the post-independence period in African countries. The exigencies of the situation demanded rapid indigenisation of trade, commerce and other industrial activity and had dampening influence on the activities of Indian industrialists. But as the African countries solved their immediate problems, some of the economic realities concerning industrialisation, and the supporting resources such as capital, skills etc came to the force. The resulting vacuum greatly encouraged Indian industrialists to set up a few ventures in some countries. One therefore finds that the expansion in trade with these countries and the business ventures set up have gone hand in hand and a commensurate increase in skill transfers through official and non-official channels has also taken place.

Trade with Africa

In overall terms India's trade with African countries has never been very large. Thus the two-way trade between India and African countries accounts for around Rs 400 crores with exports and imports of equal value. The country concentration is a noticeable feature of this trade. Overall picture that emerges demonstrates the overwhelming importance in imports from Africa of a few African countries such as Zaire, Ghana, Ivory Coast, Kenya, Morocco, Sudan, Egypt, Tanzania and Zambia, while Kenya, Tanzania, Egypt, Sudan, Zambia, Dahomey Republic, Nigeria, Ethiopia, Somalia are important in exports to Africa. Even the recent revival in India's exports to these countries is not commensurate to the total expansion in trade and could be seen in the decline of percentage share of Africa in India's total trade. This could be interpreted as providing a definite indication of scope for promotional efforts for two-

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way trade with many African countries where hypothetically Indian goods can find widening markets.

Now as the restructuring of this trade in line with diversified industrial production has taken place, engineering goods exports to Africa account for nearly 40 per cent of their total exports. African markets are still net importers of a large number of manufactured and semi-manufactured products. In Eastern and Southern Africa itself, the intra-area exports of industrial products, according to one estimate, could increase from US $300 million in 1975 to about US $400 million in 1985 and this is exclusive of important agro industrial products. India is an upcoming exporter of a majority of industrial products they need and if proper institutional and policy orientation are followed, a considerable gain could be secured in marketing the engineering goods in these countries.

The last few years have witnessed an increased export of Indian capital and technology too. Indian investment by way of equity share capital in the established joint ventures amounted to Rs 30.54 crores by January 1980 and another Rs 48.91 crores in the projects under implementation. While the South East Asian countries account for a lion's share in these investments, African investments rank second. One of the studies carried out by the Ministry of Commerce has commented favourably upon the encouraging performance of joint industrial ventures as extenders of development co-operation to the developing countries and as creators of opportunities for exports of India's capital goods, technology and know-how. Some of the important joint ventures fructified during 1970s and their growth also made clear the vital nexus between the joint ventures and the exports of non-traditional goods. It is felt that this process is likely to gather momentum with the widening of the scope of joint ventures as enunciated in the new guidelines laid down by the Government of India.

Indian Joint Ventures in Africa
(As on April 24, 1981)

Name of Indian party	Country of location	Field of collaboration	Indian equity (Rs lakhs)
Bolton India	Kenya	Auto ancillaries	5.52
Gangappa Cables Ltd.	Kenya	Copper and aluminium wire	3.00
J. K. Synthetics Ltd.	Kenya	Synthetic filament yarn	216.84
Kalindi Investments (P) Ltd.	Kenya	Pharmaceuticals	3.45
Kirloskar Brothers Ltd.	Kenya	Marketing	8.89
LIC and GIC of India	Kenya	Life and general insurance	58.30
Orient Paper Mills Ltd.	Kenya	Paper	412.88
Shri R. M. Goculdas	Kenya	Textile Mill	44.15
Salvi Pvt. Ltd.	Kenya	Cast iron foundry	0.42
The Raymond Woollen Mills Ltd.	Kenya	Woollen textiles	189.00
Exportos India	Mauritius	Readymade garments	9.33
Infin Consultants P. Ltd.	Mauritius	Steel rolling mill	6.48
Kirloskar Bros. Ltd.	Mauritius	Power driven pumps	1.12
Shahibag Entrepreneurs P. Ltd.	Mauritius	Cotton yarn terry towels etc.	69.86
Siddharth Jasubhai Lalbhai	Mauritius	Mosaic tiles and rolling shutters	0.60
Shri Kant Ruparel	Mauritius	Processing of textiles	1.73
The Raymond Woollen Mills Ltd.	Mauritius	Readymade garments (woollen)	13.19
Best Crompton Engineering Ltd.	Nigeria	Contracts for transmission lines	6.00
Birla Bros P. Ltd.	Nigeria	Consultancy	0.78
Birla Bros P. Ltd.	Nigeria	Light engineering goods	90.10
Ranbaxy Laboratories Ltd.	Nigeria	Drugs and pharmaceuticals	8.40
The Scindia Steam Navigation Ltd.	Nigeria	Shipping company	21.60
Birla Jute Mfg. Col Ltd.	Uganda	Jute goods	28.07

Total number of Indian joint ventures in Africa	23
Total value of Indian equity (Rs lakhs)	1,199.71

SOURCE: Lok Sabha Unstarred Question No. 8714, dated April 24, 1981.

Technology transfer

African countries have been an attractive area for Indian industrialists venturing out of the protected but at the same time competitive domestic market. Kenya has ten ventures under production and three ventures under implementation. Mauritius comes next with eight ventures under production and one venture under implementation. Nigeria has six and seven ventures under production and implementation respectively. Uganda, Ethiopia, Ghana and Libya are some of the other African countries where Indian investments are involved. The process know-how in the form of consultancy services has thrived well in Tanzania, Zambia, Libya, Egypt, Nigeria and Sudan. These efforts are interpreted to mean successful technology transfer which has become a key work for Indian co-operation with African countries. However, it will be premature to conclude that Indian industrialists have accomplished a tremendous task in African countries since evidence in this respect lacks uniformity.

Kenya

Let us look at the performance of Indian industrialists in Kenya where India has consistently cultivated the export market and has also launched a number of ventures in a variety of fields such as textiles, paper products, chemicals and chemical products and metal and allied products totalling to an equity investment of Rs 9.5 crores. Major industrial houses such as Birlas, Khataus, Singhanias and Sarabhais are active partners and managers in these ventures, while some public undertakings such as Hindustan Machine Tools have also taken initiative in starting machine tool production on a small scale in Kenya. Birla's Pan African Paper Mill and Khatau's Kisumu cotton mills are two of the finest ventures and have earned a place of pride in Kenya's industrial structure. All these ventures over the years have come out of woods and have achieved stability and progress and have substantially contributed to the production and export of consumer goods in Kenya. The performance of these ventures regarding contribution to foreign exchange earning and exports varies but all of them have helped Kenya substantially by the introduction and transfer of specific Indian skills of technical and middle level management. Recently a non-industrial joint venture too came up in the field of insurance wherein LIC of India and General Insurance Company have with Kenyan participation floated a new company named Kenindia Insurance Company.

In every venture without exception the top level management which includes executive director, financial controller, chief engineers etc are Indians and there does not seem to be any eagerness to Kenyanise any of these posts. The success of the ventures could be mainly attributed to the satisfactory general operating condition such as reasonably high productivity of labour, absence of labour trouble, favourable labour laws, fairly uncomplicated rules and regulations about investment, easy tax procedures and easy availability of imports.

In the light of the experience gained so far regarding the business environment in Kenya, it is not difficult for a few more industrialists to set up ventures such as mini-sugar plants, factories for three-wheeler rickshaws, plywood production, construction contracts, brick making factories, simple agricultural tool plants, pumping set production as well as auto-parts and ancillaries production. Despite strong British influence and increasing hold of multinationals on Kenya's economy, overall environment is conducive for a larger effort in this direction and the recently signed agreement between the National Chamber of Commerce and Industry, Kenya and Associated Chamber of Commerce and Industry, India, and the trade agreement between the Government of Kenya and the Government of India could herald a period of growing commercial effort in co-operative endeavours.

Tanzania

With Tanzania, India has forged very close ties since the political leadership is extremely favourable to the Indian participation in a variety of schemes. In fact, at present the low level of development and low per capita income do not ensure a very large market in Tanzania and the socialist pattern of development also means state participation and choice of products by state agencies. Due to these restrictive factors, joint business ventures are still few but consultancy and technology collaboration contracts have increased in importance and number and include some very prestigious projects such as Songo Songo gas exploration projects, manufacture of bicycles, Kagera sugar project expansion, railway consultancy contract, farm implement factory, know-how supply contract, Dodoma Capital Development project contract etc.

NIDC's co-operation with NDC of Tanzania in technical and consultancy matters has resulted in setting up Documentation Centre for NDC and carrying out feasibility studies for a number of industries. These efforts have resulted in the tremendous goodwill for Indian experts in Tanzania and have laid a sound foundation for other Indian businessmen to set up industries. Over and above this, the small scale industry development in Tanzania has received financial and physical assistance from India. India accepted a turnkey project in Tanzania to set up 48 small scale units, and a credit of Rs 2.5 crores was provided by the IDBI for the purchase of machinery. While the progress achieved is stated to be halting, local problems are being resolved to ensure speedy implementation.

In the Third Five Year Plan of Tanzanian Mainland, India's varied participation is expected and certain tie-ups on the basis of production co-operation are also visualised in areas such as cashew nuts, oilseeds, engineering items, diamond processing and mica production. In the manufacturing sector good scope exists in terms of our own capabilities for sewing machines, fans, domestic electric appliances and farm machinery industry etc. As it is India's products have penetrated in an effective manner in Tanzania.

India has developed close co-operation with Zambia as well and more than 2,500 Indian experts are at present working in Zambia. The trade agreement signed last year is expected to result in strengthening further the commercial side of our relations. In fact, repeated requests have been received from Zambia seeking India's assistance for a number of industrial projects such as steel re-rolling mill, paper and pulp project, small scale industries and industrial estates. The manufacture of hardware, agricultural implements, abrasive and sanitaryware, pumps, transformers, conduit pipes, hoes and shoes are some of the priority areas where investments are needed. The recent offer of Rs 100 million credit to Zambia will also result in new ventures. Zambia's copper wealth and fertile agricultural land makes Zambia a potentially rich country. While President Kaunda's visit in September 1980 and President Sanjeeva Reddy's visit in June 1981 have opened up new possibilities of co-operation, the birth of Zimbabwe has slowly allowed Zambia to attain normalcy which should make Zambia an attractive area for investment in a large number of labour intensive industries which receive a preferential treatment in Zambia. The first indication of this is the prospect of India bagging a rail contract for $18 million.

Nigeria

In Nigeria and Libya also, Indian entrepreneurs and technical experts have won laurels. Nigeria with its 80 million population and oil-bonanza is a proven area for prospective investments. The Third Development Plan, for 1975-1980 laid more emphasis on development of agriculture, increased food production, industrialisation, education and health. The contribution of manufacturing sector to gross domestic production though small, has maintained a consistently high growth rate over the past decade and accounts for 18 per cent of the GDP in recent years. Under the Third Plan, the Government aimed to encourage agriculture based industries and to establish chemical and petro-chemical industry, iron and steel complexes as well as development of automobile industry. Thus emphasis was gradually shifting from import substitution to the establishment of basic and intermediate industries. This itself opens untapped vast opportunities for entrepreneurs.

The Nigerian Investment Information and Promotion Centre is well equipped to provide requisite information to investors on matters relating to setting up of new industries and the Nigerian Enterprises Promotion Decree 1972 (published July 1977) provides the general operating framework. So far Indian entrepreneurs have set up plants for the manufacture of steel furniture, fans, fabricated steel materials and razor blades and provided management to a paper mill. Hindustan Machine Tools is also going into the machine tool plant in Nigeria while the Metallurgical and Engineering Consultants (India) Ltd have already bagged a prestigious contract of evaluation and project supervision of a steel plant with an investment of US $1 billion. A contract for $50 million is under negotiation to run the Nigerian railway for two years as the first $25 million contract expired in June 1980. This is to indicate the breakthrough that India has achieved in a fast expanding market in West Africa. If plants based on local resources of Nigeria are envisaged, Indian industrialists can enjoy bright performance in Nigeria where a beginning has already been made. The Indo-Nigerian joint commission held its first meeting in New Delhi recently and India has expressed her willingness to co-operate further in the Nigerian process of industrialisation.

Libya

In Libya, another oil rich country in Africa, Indian industrialists have developed close liasion. The Government of Libya had entrusted the work of preparation of the 1976-80 Development Plan to NIDC of India which was already acting as consultants on a turnkey basis for a steel melting and billet –casting plant at Tripoli. India's participation in development projects in Libya is expected to increase from Rs 600 crores to Rs 1,200 crores as a result of the protocol signed on the conclusion of Indo-Libyan Joint Commission at the end of 1978. Bharat Heavy Electricals Ltd (BHEL), Hindustan Steel Construction Ltd, and National Building and Construction Corporation are involved in huge projects in Libya. These important contracts have also heir counterpart in increased exports of variety of items.

Some failures

The success achieved in setting up ndustries, transferring skills and technoogy to some of the African countries is lso accompanied by some failures in ther countries such as Mauritius and Ethiopia. Particularly, Indian indusrialists have found it tough to function moothly in Mauritius as far as the joint entures established so far, which numer eight under production and one under implementation, are concerned. Mauritius which has more than 50 per cent of its population of Indian origin has age-old contacts with India and a pro-Indian government. Being a geopolitically strategically situated island, entrepreneurs from various countries are active on the Mauritian soil. The export processing zone established during the last decade attracted many outside investors to the country.

Most of the Indian ventures started production during 1971 to 1975. The products produced by these enterprises cover textiles, readymade garments, steel rolling mills, mosaic tiles and rolling shutters etc. Most of them have found it a tough going and the huge recurring losses suffered by these ventures have been a source of uncertainty to new entrepreneurs. One finds a rare example of Iron and Steel Ltd which was out of red by 1979.. Hydro Dyne Ltd, a venture of Kirloskar Bros Ltd for power driven pumps which went into production on a very small scale in 1978 is reported to have achieved steady growth. Though some allowance will have to be made for the impact of extra-critical condition of the Mauritian economy since 1975 as the sugar boom started petering out, it became clear to the author that Indian industrialists in Mauritius were poorly acquainted with the Mauritius socio-economic environment, characteristics of labour force, its value system and attitudes. Over and above this, a short term perspective and an obsession for quick gains seemed to have marred the initiative of these entrepreneurs making them throw up their hands at the slightest sign of difficulty.

It is perhaps here that Indian industrialists venturing in any of the African countries need to be cautioned. It was not at all unusual for industries set up at the peak of the boom to suffer badly during the immediate downswing compounded by other difficulties such as raging inflation, unwilling and low productivity labour forces, port congestion etc. Though no industrialist would like to continue with a chronically sick unit and would prefer the closure of the industry, with a manageable loss, it would be in the long term interest of Indian industrialists not to escape the misfortune by quitting the scene. In this process not only will they miss a prospective upswing but would do untold harm to the growth of future Indian enterprise in Mauritius as well as to the trend of healthy development of Indo-Mauritian relations which have by now developed a sound base. Indian industrialists' plight in Mauritius has certainly a few lessons to offer to ventures in Mauritius in particular and African countries in general.

Indian joint ventures under implementation in Africa
(As on 31.8.1980)

	Country		Number of joint ventures	Indian equity (Rs lakhs)
1.	Nigeria	..	8	1,209.74
2.	Liberia	..	1	68.00
3.	Seychelles	..	1	67.50
4.	Kenya	..	4	50.25
5.	Zambia	..	1	30.00
6.	Mauritius	..	1	13.40
7.	Libya	..	1	10.00
8.	Botswana	..	1	5.00
	Total		18	1,453.89

SOURCE: Indian Investment Centre, **Indian Joint Ventures Abroad**, May 1981.

The tradition of government to government co-operation in economic and technical matters has been established over a period of twelve years and Indo-Mauritian joint commission on economic, technical and cultural co-operation concluded in 1979 laid down the guidelines for strengthening co-operation in varied fields such as trade, small scale industries, agriculture and rural development, public transport, medical facilities, meteorology and tourism. The Project and Equipment Corporation of India will assist the Mauritian authorities in securing supplies of machinery and equipment from India. India has offered to provide consultancy services to Mauritius for setting up a national shipping corporation and a national transport corporation. Deputation of Indian experts in Mauritius and the provision of training facilities for Mauritian nationals in India are the added aspects of technical co-operation programme between the two countries. This has also been matched by Rs 10 crore assistance and Rs 5 crore credit to Bank of Mauritius. In view of the multifarious co-operation, it is essential that Indian joint ventures in Mauritius by their performance add lustre to the co-operative endeavour.

A majority of African countries have their industries concentrated in and around cities due to the development of infrastructural facilities. Just as a success story of the Pan-African

Continued on page 276

Tax paying honesty and reduction

By **ARVIND BHANDARI**

DATELINE NEW DELHI

THE Finance Minister seems to be willing to reduce the tax on corporate and non-corporate incomes. At least this is what he told the Central Direct Taxes Advisory Committee on July 27. But the Finance Minister is insisting on putting the cart before the horse. Mr Venkataraman told the committee: "The question of reduction in the tax rates is inextricably linked with the degree of voluntary compliance on the part of taxpayers". In other words, he is making tax-paying honesty a pre-condition for tax reduction. Surely, he cannot be so ignorant as to not know that tax-paying honesty is itself a casualty of high taxation. Therefore, tax-paying honesty is incumbent on tax reduction and not vice versa. The Finance Minister also made the observation that the question of tax reduction was "subject to the overall budgetary compulsions". This is fair enough. But the question arises how much weight corporation tax and income tax carry in the Government's revenue. It is worth reflecting that in the budget estimates for the current year the receipts from corporation tax and income tax are put down as Rs 1,690 crores and Rs 1,599 crores, respectively, against a total tax and non-tax revenue of Rs 18,262 crores. From this it should be abundantly clear that lowering of income taxation on the corporate and non-corporate sectors would make a miniscule difference to government revenue. In fact, if the view that taxation has already reached the stage of diminishing returns is correct, it is quite possible that tax reduction may not result in diminution of revenues. Furthermore, a factor which has been a constant source of economic disincentive, corruption and general deterioration in national character will become less pernicious in its operation, if not altogether eliminated. While businessmen are no angels, FICCI's repetitive plea for reduction of the corporation tax to 50 per cent is sustainable on economic grounds. To go further, the opinion is fairly widespread that all bonafide savings should be exempted from income tax so that it would, in effect, become an expenditure tax, which is fundamentally a superior concept. The Finance Minister's assurance that the Government is seized of the problem of tax reforms carries little conviction. Much time has elapsed since the reports of the Wanchoo Committee and the Choksi Committee on direct taxes have been gathering dust on governmental shelves. In order to avoid action the reports were entrusted to an official committee in the Finance Ministry for examination. Since the official committee has served its purpose of enabling the Government to shilly-shally, the two reports have now been thrown into the lap of the Economic Administration Reforms Commission, which is becoming a vehicle for governmental procrastination. Such dawdling speaks of evasiveness, not action.

Gold ahoy

Reports from Dubai allege that more than 5000 tolas of gold is being smuggled into India every day. There is a minimum gap of 20 tonnes in the supply and demand of gold in this country. When the international price of gold dips sharply, Dubai traders, acting through Pakistani and Indian agents, step up their activity. Dubai is believed to have imported 3,000 kg of gold in May, most of which was sent to India. Recently, the smugglers switched their base to Delhi on finding that Bombay was no longer "safe" following the frequent cases of tip-off, seizure and arrest. In a business turnover of Rs 260 crores, the smugglers' net profit is estimated at Rs 60 crores. Gold also continues to be a favourite item for operators on the land border. The administration is said to have records of persons in north India who have become millionaries within a short time through smuggling across the India–Pakistan border. While India is a bottomless pit for gold, the country appears to have large quantities of silver to spare for the clandestine market. Of the 1600 tonnes of the white metal that becomes available in the country every year the domestic consumption is less than 50 per cent. The balance finds its way to foreign markets, mostly through smugglers exchanging gold for silver. Silver is much in demand in the West for industry. There is a profit margin of Rs 450 to Rs 500 per k of silver because of the notable difference in domestic and internationa prices. In January alone more tha 90,000 kg of silver was smuggled out o this country. The spurt in the smuggling of gold and silver reflects much discredit on the preventive staff of th Customs Department. The technique adopted by smugglers and their collaborators in India are well-known, an the usual hideouts are on India's extensive West coast, especially Bomba and Kutch. And yet the customs ar outwitted month after month, the seizures in Bombay and Delhi being a fraction of the smugglers total turnover. I is almost certain that some of the preventive staff look the other way, for consideration, while boats bringin Dubai gold land at predetermine places on the Indian coast.

No petro-dollars

When the Government relaxed it foreign investment policy a few month ago and announced that petro-dollar from the oil-exporting developing countries could come in unaccompanied b technology, I had prognosticated i these columns that nothing much woul happen, and so it has transpired. A that the scheme, which is supposed t benefit the core sector industries, ha yielded so far is a solitary joint ve ture in cement. The Arabs seem to b interested only in quick-yielding pr jects, which means hotels. It has no been decided, in what is apparently surrender to harsh realities on th ground, that the Indian hotel industr can avail of the facility of 100 per cen financing by the Arabs, 40 per cent i the form of equity and 60 per cent loans. If the country is seriously interested in attracting the individu Arab investor, it will have to make investment more attractive by somewh loosening the constructive regulatio relating to equity participation, ta ation and repatriation of profits. Otherwise also it seems that it would perha be more fruitful to concentrate effort on attracting Arab institutional rathe than individual finance. Such instit tional finance. secured hopefully concessional terms, could be funnell into our public financial institution To the extent inflow of foreign capit adds to money supply in the econom it has an inflationary impact who containment depends on the judicio ness with which the corresponding a cretion to foreign exchange reserves utilised by the Government.

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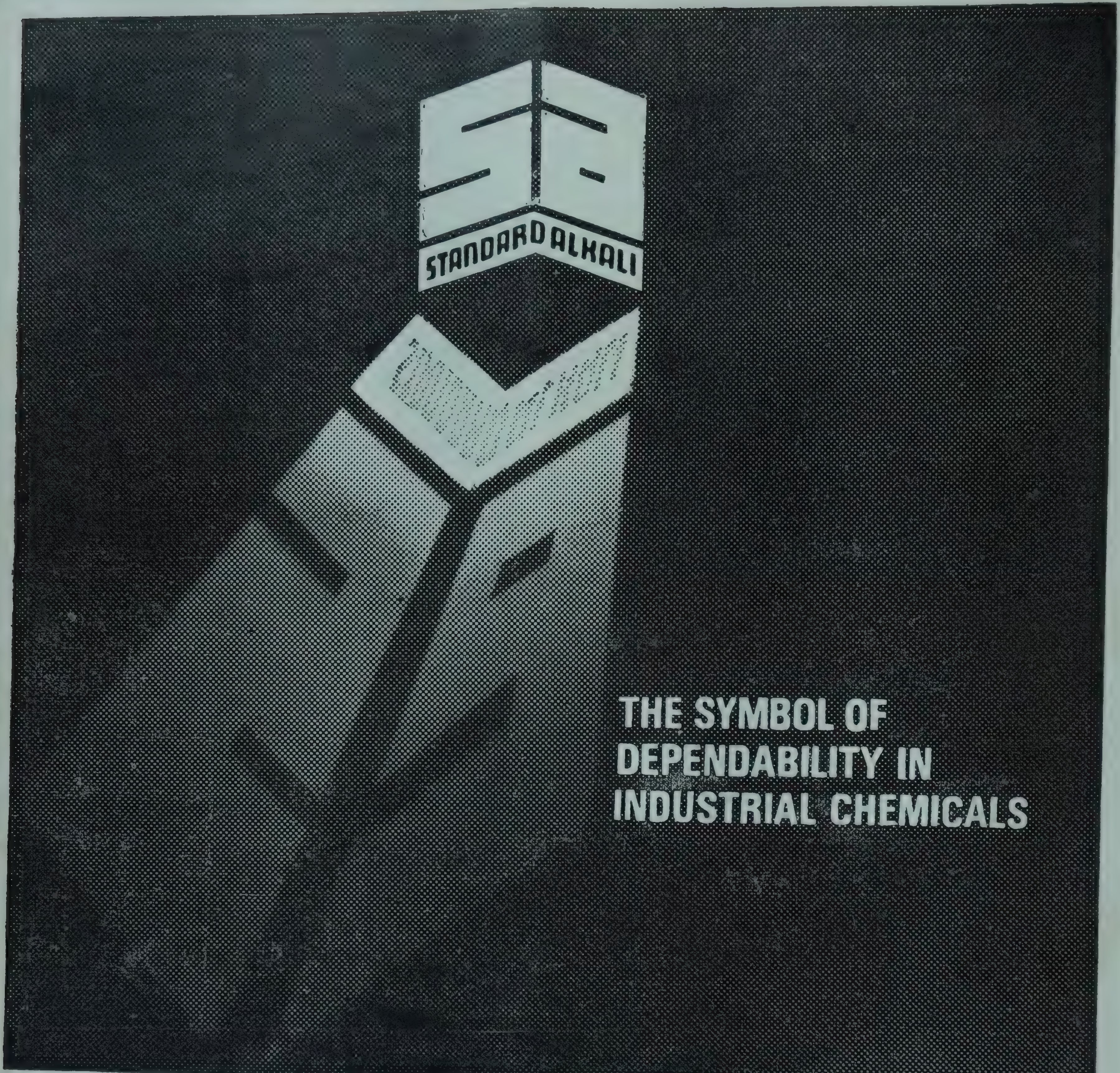
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PRESSMAN

More uranium for nuclear power

By P. C. MAHANTI

URANIUM mining in eastern India in Singhbhum district of Bihar specially is going to get a big boost with the Uranium Corporation of India's plan to work a relatively large deposit in Bhatin near Jaduguda where the Corporation's existing ore treatment mill is located. The capacity of the mill to treat the ore from Bhatin will also be suitably expanded. The project as a whole will cost Rs 8 crores. It is a three-year plan which incidentally highlights the importance of eastern India as a storehouse of minerals both economic and strategic.

The corporation's schemes to open new and separate mines and mills in Turamidih and Narwapahar, some 10 km away from the existing Jaduguda complex, at a total cost of Rs 91 crores have also been cleared. A nickel recovery plant forms part of these new projects since ore in the proposed mines is said to contain nickel as well.

These projects are meant to raise the output of uranium ore together with the production from mines in other parts of the country to meet the requirements of the country's nuclear power programme. The Government has set a target of 1,000 mw for nuclear energy by 2000 AD. According to an expert a 400 mw nuclear power station — the type of power stations being set up in India today — would require 60 tonnes of uranium per year. Accordingly output increases are being planned by the Uranium Corporation to feed the growing nuclear electric capacity in the country.

EASTERN INDIA TODAY

The uranium ore in Singhbhum is not of very high grade. It has a mineral content of only 0.067 per cent as against 0.1 and 0.2 per cent in other countries. Since economic minerals like copper, nickel, molybdenum and magnetite are also associated, though in small quantities, with the ore the Jaduguda complex has been running at a profit by selling these minerals in the market. It earned Rs 58 lakhs from these sales last year. The Jaduguda mill has facilities to recover these minerals at the same time as it is processing the uranium ore which is its main function. The proceeds from copper and other minerals are contributing substantially to the profit the Uranium Corporation has been earning. It also claims to have invented a low-cost ore processing method, all on its own, and the mining technology is now wholly indigenous.

Industry ministers' meet

The conference of industry ministers of the North-Eastern region held in Shillong recently was marked by a high seriousness of purpose — the seven governments of the region are anxious to promote industries in their territories as best as they can. The Industry Minister, Dr Charanjit Chanana's announcement that the capital investment subsidy for entrepreneurs will be enhanced from 15 per cent to 20 per cent has created the impression that the Centre, especially the Prime Minister, is keen to see the region growing industrially fast. The Industry Minister has stated that the industrial potential of the region is great. Only powerful catalysts are needed to bring about the necessary stir of growth. To begin with testing centres and raw material buffer stock depots will be set up in the region but the states concerned must revitalise the existing institutions for growth and must set up at the same time all necessary management and technical institutions. The North-Eastern Council should do its bit in collaboration with reputed management institutes too.

Power generation and small industries would necessarily get priority in any scheme of economic growth here. The conference has taken decisions to set up several micro-hydel units which could become operational in a short time. A standing committee of the small scale industries board for North-East region has also been set up with Mr P. A. Snagma, Union Deputy Minister for Industries, as chairman. He hails from the region and has been advocating immediate measures to develop the region's rich forest resources. The standing committee will prepare schemes to help all intending entrepreneurs launch their ventures within as short a time as possible.

Lack of adequate communications has been a serious factor behind the regions slow industrial growth. Rail communications in particular is poor. In the Union Territory of Arunachal Pradesh, for instance, there is no railway line yet. However, steps are being taken to remedy this serious deficiency. Some six new railway lines will be constructed during the current year at a cost of Rs 12 crores. The total length planned is nearly 210 km of which nearly 40 km will be in Arunachal Pradesh.

Declining importance

The importance of Calcutta as an international airport seems to be declining. Of the four international airports in the country it has now slipped to the third place after Bombay and Delhi. According to the latest report of the International Airport Authority of India, covering 1980-81, Calcutta had only 7,619 aircraft movements on the international side and 14,188 on the domestic side against Bombay's 27,331 international and 21,707 domestic and Delhi's 13,343 international and 16,693 domestic aircraft movements. Only Madras lagged behind Calcutta with 2,912 international and 10,326 domestic.

Passengerwise Calcutta fell even further back. It had a total of 300,156 passengers on international flights and a little over one million on domestic flights whereas Bombay had 2.8 million passengers on the international side and to 2.3 million passengers on the domestic side and Delhi 1.57 million passengers and 1.47 million passengers on the international and domestic sides respectively. In cargo traffic Calcutta's share of the total was a mere 6,600 tonnes on the international side as against Bombay's 69,000 tonne Delhi's 32,000 tonnes. Even Madras had 18,700 tonnes. On the domestic traffic Calcutta's share was 10,400 tonnes compared with nearly 22,000 tonnes for Bombay and 16,600 tonnes for Delhi. Here Madras lagged behind.

If the Airport Authority of India is providing less for the development and modernisation for Calcutta than what it does for Bombay and Delhi airports it cannot be blamed. Moreover, Calcutta airport is a losing institution with little prospect of only great increase in traffic despite the fact that it is the aerial gateway to the Far East and South-East Asia. Calcutta airport's prosperous years were in the late 60s and early 70s when so many gigantic industrial projects in foreign collaboration were coming up at once. It is difficult to see what else but a massive industrial investment can bring back the old prosperity. If much-talked about Paradeep steel project really materialises and the modernisation and development of Durgapur steel plant are carried out expeditiously (press reports have it that Durgapur's modernisation programme costing Rs 1,000 crores has been cleared by the Steel Authority of India) then Calcutta airport prospects may be altered for the better soon.

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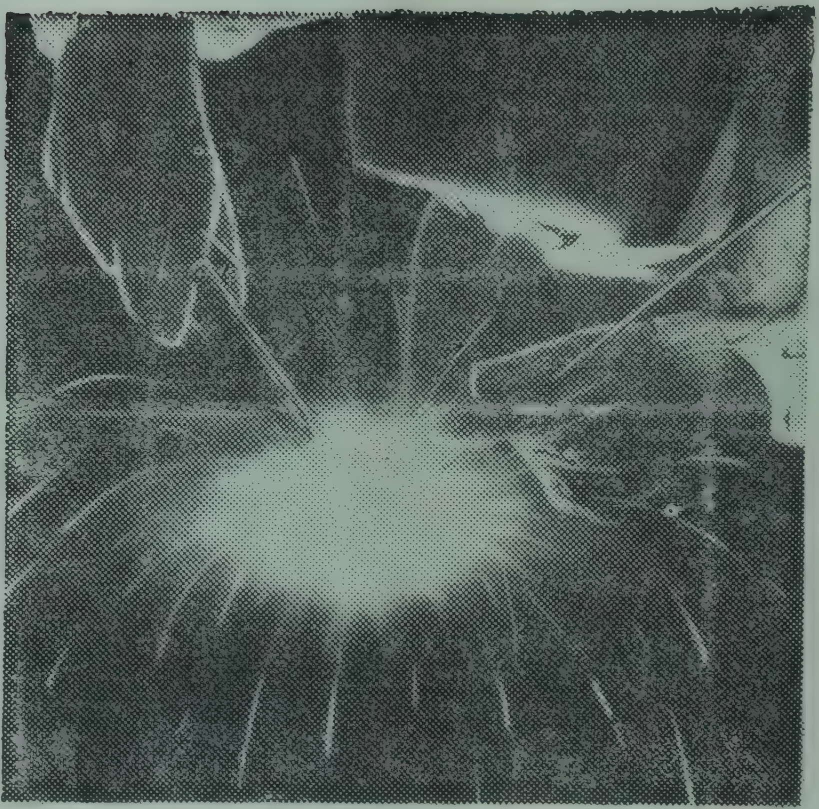

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10 AUG 1981
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SPECIAL ARTICLES

ENERGY

India's plan to develop new sources

From Our Special Correspondent

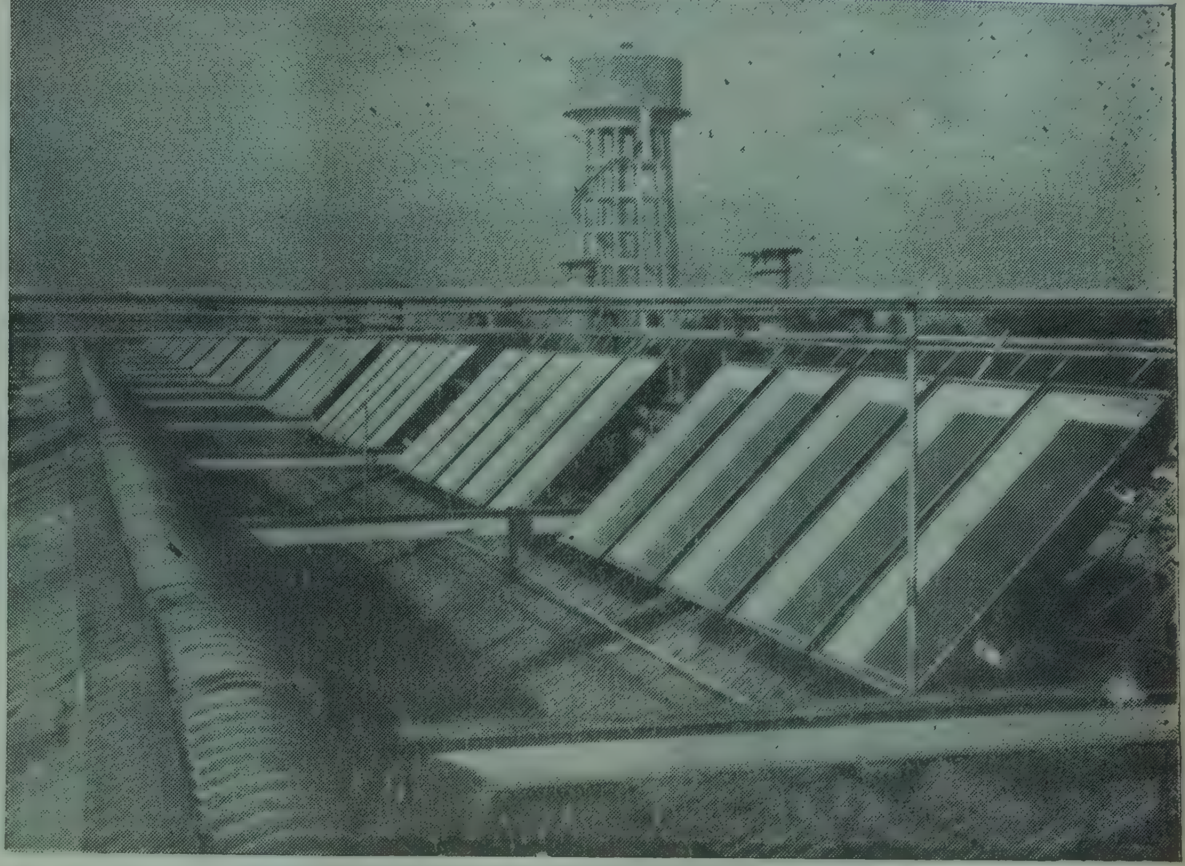
NEW DELHI

A NATIONAL paper prepared by India for the United Nations Conference on New and Renewable Sources of Energy, to be held in Nairobi, outlines the national plans for the development of new and renewable sources of energy and foresees these sources of energy playing increasingly a greater role in the total energy demand of the country.

It says that the sharp increase in oil prices, uncertainty in supplies, difficulties in producing and transporting increasing amounts of fossil fuels, environmental degradation caused by conventional fuels are among the factors which have led India to focus attention on renewable energy sources. The main sources of renewable energy of importance to the country are hydro-power, solar energy, bio-energy, wind energy, ocean energy and animal energy. Of these bio-mass as a fuel and animal energy for mechanical work and transportation have been known and used in India since time immemorial. Solar energy used for application such as drying has long been part of Indian way of life. The utilisation of hydro-power in a significant manner began only in this century though its use for motive power has been known in the hills in ancient times. Bio-gas is being used as a fuel since the last few decades. Serious efforts to utilise solar and wind energy begin only after the oil crisis in 1973.

Outlay

The Sixth Plan envisages a significant increase in the allocation for research and development and demonstration programme in all these areas. An amount of Rs 400 million had been allocated for this purpose in the years 1980 to 1985 in addition to Rs 100 million for a project relating to magneto-hydro-dynamic power generation and other new technologies based on coal. This may be compared with an amount of Rs 46.67 million actually spent by the Department of Science and Technology from 1974-75 to 1979-80 on R & D programmes for the new and renewable sources of energy.



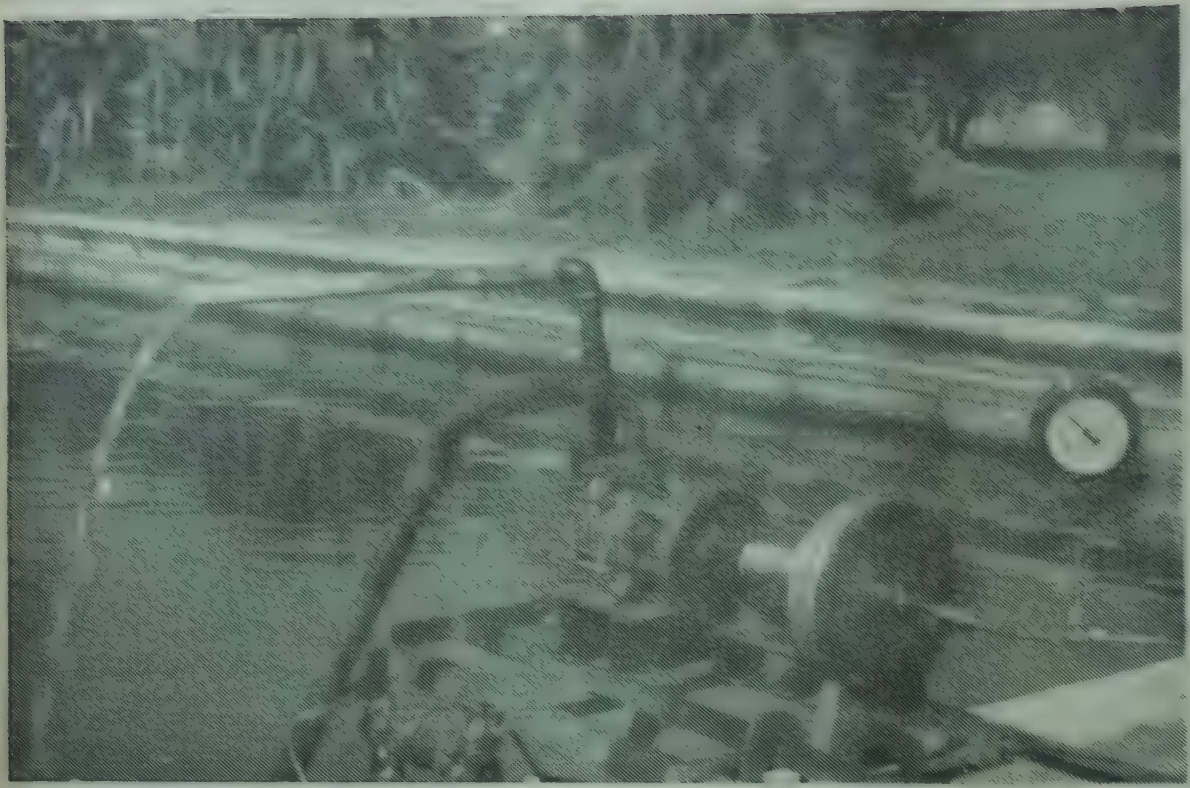
Solar panel providing energy to a textile mill

The significant increases being planned in this area may be judged by the fact that the outlay during the first year of the Plan (1980-81) was Rs 22.5 million (revised to Rs 24 million) while the outlay for the second year has been proposed at Rs 70 million. A separate allocation of Rs 500 million has been made in the Plan for schemes on fuel and farm forestry.

The government also proposes to promote the wider utilisation of renewable energy systems through various incentives, subsidies, etc. The Plan provides for Rs 500 million to be spent on subsidies and some supporting facilities for the establishment of family bio-gas plants. Prospective owners of bio-gas plants also have access to loans from the banks and other financial institutions. The budget proposals of the Union Government for the year 1981-82 include provision for accelerated depreciation on machinery or plants installed for the manufacture of renewable energy systems and devices; users installing such systems for professional or business purposes will also have the facility of accelerated depreciation of these systems. The Government has recently announced exemption of solar, bio-mass and wind energy devices and systems from excise duty; other incentives including loans on suitable terms are under consideration. This promotional package together with cost reduction to be achieved through technology improvement and large-scale production should make renewable energy systems economically competitive for certain types of application, with systems based on conventional sources.

The United Nations is organising a conference on New and Renewable Sources of Energy in Nairobi from August 10 to 21. India is attaching considerable importance to the conference. The Prime Minister, Mrs Indira Gandhi, is scheduled to attend the Nairobi meet.

Research and development activities in the area of new and renewable sources of energy will be intensified in the Sixth Plan. At present the Department of Science and Technology is funding R & D programmes which are being executed by over 40 national laboratories, public sector undertakings, Indian Institutes of Technologies and universities. A large number of research groups have been developed. At present there are several hundreds of scientists and technologists on a variety of areas covering bio-gas, bio-conversion, photo-voltaic devices, solar thermal systems, wind mills, hydrogen energy, batteries and battery-powered vehicles and integrated energy systems. This infrastructure will be strengthened and support extended to competent research groups throughout the coun-



Bio-gas driven pump

try. While all problems pertaining to renewable energy utilisation will receive attention. The areas which will receive priority include the following :

(i) bio-gas production and utilisation at lower costs and with different feeds in different agro-climatic conditions;

(ii) fast growing trees; petro and other energy crops;

(iii) bioconversion technologies;

(iv) solar thermal systems for low and medium temperature domestic and industrial applications;

(v) windmills for pumping water and lower power generation;

(vi) development of solar grade silicon and economic methods of solar cell production;

(vii) solar photo-voltaic applications;

(viii) development of prime movers for use with solar, wind and bio-gas sources;

(ix) energy storage systems;

(x) hydrogen production and storage;

(xi) electric vehicle development;

(xii) energy conservation and more efficient ways of utilising conventional sources;

(xiii) micro and mini hydel and low head hydel plants; and

(xiv) ocean energy plants and technologies.

In addition to research funded directly by the Government it is expected that several public and private sector organisations will take up the R & D programmes for various applications.

Additional Energies Commission

Essential element of any strategy for the development of new and renewable sources of energy would be an appropriate institutional arrangement which can prepare policy, co-ordinate its implementation and generate awareness. The Government has recently established a Commission for Additional Sources of Energy and the Commission will formulate policies and programmes for development of new and renewable sources of energy, coordinate and intensify research development activities in new and renewable sources of energy and ensure implementation of the government's policies in regard to all matters concerning new sources of energy.

Demonstration and awareness programmes

The efforts on research and development put in so far have resulted in the indigenous development of some renewable energy systems which have crossed the laboratory stage and are ready for large-scale demonstration and field evaluation. The Department of Science and Technology has launched a programme of demonstration of various renewable energy systems with a view to evaluating the performance of various devices and systems developed in the country in field conditions. The demonstration programme at present covers solar water heating systems, solar driers and kilns, solar refrigeration systems, solar distillation units, photo-voltaic systems for pumping, lighting and other applications wind mills and wind generators, community bio-gas plants and battery-powered vehicles.

Among solar thermal systems, water heating units have been installed or are under installation at several locations including hospitals, hotels, bakery and dairy units, textile mills, etc. Many units have been installed on a commercial basis. Units for drying grain, cash crops, timber, milk, tobacco, and veneer have been set up at several locations. Cold storage units for certain crops are being installed.

Solar photo-voltaic pumps which can be used for micro-irrigation and drinking water supply have generated widespread interest in the country. By February 1981, six such pumps had been installed at various locations including two villages. It is expected that about 70 pumps will be installed by the end of 1981. Some of the initial pumps will be set in agricultural universities and similar establishments from where it would be possible to obtain necessary data on the performance. As the production of photo-voltaic pumps picks up, it is expected that several thousand pumps will be installed in the country, initially for demonstration purposes and later on a commercial basis, as the costs of the pumpsets come down through R & D efforts and large volume production.

The country's first solar photo-voltaic lighting system has been set up in Choglamsar village of the Ladakh region in the State of Jammu and Kashmir. Another village energy centre utilising photovoltaic panels to power lights at a community centre and a community TV set has been commissioned in the Charsarhati village of West Bengal. Demand for photo-voltaic systems for specialised application such as off-shore platforms, communication TV sets and rural telephones has been increasing recently.

The first community bio-gas plant in the country was established at Kodamanja village in the Karimnagar district of Andhra Pradesh in 1976, and was financed by the Rural Electrification Corporation. A "co-operative" plant was set up in 1974 under the technical guidance of the Khadi and Village Industries Commission to provide gas to some staff quarters at a sugar factory at Vuyyur in Andhra Pradesh. Another community bio-gas plant was established by the Planning Research and Action Division of the Uttar Pradesh State Government at Fateh-Singh-Ka-Purva village. About 20 community bio-gas plants are now being established at various locations in the country under a programme sponsored by the Department of Science and Technology. The plants will provide gas for cooking and lighting as well as for running engines, pumpsets and generation of electricity. They will provide benefits to all sections of the community they serve, irrespective of income levels, cattle ownership and social status.

Significant demonstration programmes will relate to integrated energy systems for rural areas. While R & D efforts in this direction are still going on, such integrated systems are to be constructed in a few locations in the country during the Sixth Plan. Depending on the local meteorological conditions and the availability of material, these systems will consist of bio-gas plants, wind mills and solar photo-voltaic and thermal systems. It is hoped that such decentralised systems will meet to a large extent the energy requirements in rural communities. The decentralised units will provide lighting for homes and streets; fuel for cooking and heating water; motive power for pumps to provide water for irrigation and drinking; motive power and electricity for applications such as grinding and local industry; and low grade heat for cottage industry. It has already been demonstrated that bio-gas could be collected in large bags and fitted to tractors which can run on the gas. This opens up possibilities of providing fuel for mobile mechanical work also.

The response to the renewable energy systems already installed has been good. When a comprehensive scheme of incentives is implemented, there will be no doubt be widespread demand for these systems. The growth in awareness also generates additional demand. If this can be matched by a suitable capacity for production and by an infrastructure to distribute, install and maintain the systems, it should be possible for modern renewable energies to increase their contribution to the total energy demand to a very significant percentage.

TRANSLATING PLANS INTO ACTION

Maharashtra's Determined Efforts To Better The Lot of the Poor

Poor masses are the backbone of democracy.

It is therefore the bounden duty of every democratic Government to make conscientious efforts to bring about all-round development of the poor masses as speedily as possible.

The Government of Maharashtra have during the past eleven months, taken a number of decisions aimed at bettering the lot of the poor and downtrodden and have made determined efforts towards their quick and successful implementation.

Time-bound programmes have been formulated to remove regional imbalances in the state.

14-point programme for development of Vidarbha, 5-point programme for the Konkan region and 35-point programme for Marathwada have already been put into action.

Special schemes have been devised for the development of western ghats.

For the first time in the history of the state rain-water flowing westwards from the western ghats will now be harnessed for generation of electricity and irrigation.

The Sanjay Gandhi Niradhar Anudan Yojana and the Sanjay Gandhi Swavalamban Yojana, the two prestigious schemes of the new Government, have proved to be a boon to their respective beneficiaries, the old, invalid, infirm, destitutes and the like and the unemployed youth both educated and uneducated.

A sum of Rs. 73,24,871 has been distributed so far to 38932 persons under the Sanjay Gandhi Niradhar Anudan Yojana.

The beneficiaries of the Sanjay Gandhi Swavalamban Yojana number 18212 to whom an assistance of Rs. 3,46,48,811 has been granted.

Indira Gandhi Pratibha Pratisthan is yet another unique scheme.

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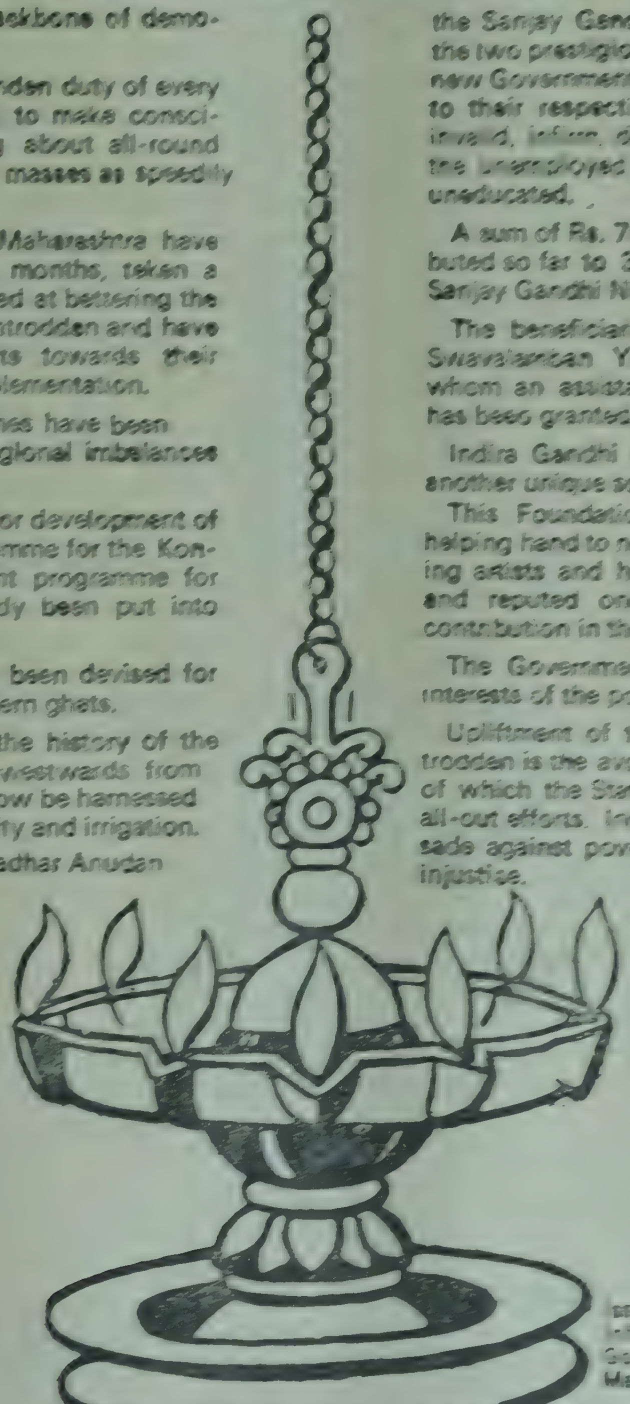

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Energy for every hearth

By ENRIQUE IGLESIAS

INDUSTRIALISED and developing countries alike are affected by growing energy demands as they work towards their goals of economic and social development. Supplies of commercial fuels such as petroleum and coal are beset by uncertainties, and threatened with depletion as the demand from the modern section continues to grow. In rural areas, supplies of commercial fuels are much more limited and the increased energy demands have resulted in rapid degradation and depletion of biomass resources. This has caused what is known as the "second energy crisis", namely the fuelwood shortage.

In order to solve these problems, a new approach to energy sources is urgently needed. And it is the responsibility of humanity to ensure that this transition is rationally planned and executed through a marshalling of national resources and international co-operation. The UN Conference on New and Renewable Sources of Energy represents a momentous step, because it is the first concerted, global effort to plan a rational energy future for the world.

Preparations for the conference have been under way for over two years. International technical panels have met to discuss the current state of development and the future potential of the various sources to contribute towards national and world energy requirements. *Ad hoc* groups of experts have examined the roles of national policies, international financial agreements, and financial institutions in promoting the use of new and renewable sources. Building on the work of the technical panels and *ad hoc* groups, a synthesis group generated a comprehensive assessment of the technological and economic prospects of new and renewable energy sources as well as the constraints and problems involved in their application.

Among new and renewable technologies, the synthesis group identified mini hydro, small-scale solar and biomethanation as already feasible and available for rapid and decentralised proliferation. Large-scale hydro, geothermal, wind, and to some extent tidal power will continue to play important roles in centralised networks which benefit principally urban areas. The prospects for other biomass and peat technologies such as the production of solid, liquid and gaseous fuels are of considerable interest.

Small-scale solar technologies for water pumping and distillation, low temperature heating, cooking, crop drying and power generation are available and are expected to play a significant role in the near future. Small and medium-sized windmills used in a decentralised system are already economically competitive in many areas, whereas medium and large windmills are expected to be attractive enough for autonomous and integrated use in windy areas.

Other new and renewable technologies such as ocean thermal energy conversion, geothermal energy, large scale solar power, tar sands and oil shales are very promising. With suitable support for research, development and demonstration, these could emerge as significant options in the short-and medium-term future.

Overcoming the constraints which hinder the use of new and renewable sources is perhaps the main focus of the conference. The synthesis group found that the principal constraints concern policy, planning and institutional issues. Most countries do not have energy information available to undertake long-term national energy policies that take into account the development and use of new and renewable energy sources as a whole within their own overall energy perspectives. Such a long-term policy is essential because there is usually a considerable time lag between decisions related to energy and their implementation. Accordingly there must be a long-term political commitment by governments to tasks such as research and development, or raising awareness of new and renewable sources.

Relatively few developed and developing countries have so far formulated and implemented proper national energy policies. Where they do exist, energy plans are often characterised by assumptions of relatively cheap energy sources, or outdated consumption patterns of oil or other fossil fuels. Estimates for future energy needs are rarely based on adequate analysis of future demand, and planning for energy is often done independently of other sectors of the economy. Finally, many countries have not yet adequately considered the energy potential of renewable sources and their favourable implications for overall development objectives.

However, the constraints identified in the synthesis report are not absolute barriers to the greater immediate use of new and renewable sources in any country. These barriers can and should be tackled effectively through appropriate and urgent national, regional and international action. Precisely what kind of action will be determined by the course of negotiations in Nairobi ? But speaking for the secretariat of the conference, there are several major thrusts in which it is important that this conference have an impact.

We want to create awareness of the energy issue, its relationship to development and to the real needs of both the developed and the developing countries. If we can alert public opinion to the gravity of the energy problems of the developing countries (for example, the severity of the fuelwood crisis) and thereby create a climate of political will for change, we will be moving in the right direction. Simultaneously, of course, the potential contributions of new and renewable sources to developed countries should be made known.

The conference must also aim at efforts at the national level. Many energy problems are internal and hence require internal action and real change. We need, for example, to assist governments to obtain innovative institutional mechanisms and to give them greater access to information and data in order to make the right decisions.

At the same time, the conference should give impetus to international co-operation. In the area of traditional energy resources, much more is needed to help alleviate the fuelwood crisis. A very modest start has already been made, in which the World Bank and the International Development Association are involved. In addition, some bilateral assistance has been directed to the problems of fuelwood. But much more must be done.

International co-operation on the energy problems of modern societies has to be intensified to speed up the entry of new technologies into the energy balance. Another point is the need to stimulate international assistance through the transfer of financial and technical resources of developing countries to support training, energy research and technology transfer.

Finally, the conference can do much to promote a strong co-operative effort within the United Nations system. In a way, the conference will actually begin only after we have left Nairobi, because it is then that concerted action will start. If this action is fruitful, it will benefit the whole of humanity and will contribute to the construction of a true and lasting new international economic and social order.

Is bio-gas a life-belt for the rural poor?

By A SPECIAL CORRESPONDENT

NEW DELHI

DURING the sixth five year plan (1980-85), there will be a major increase in the number of bio-gas plants in the country. A sum of Rs 50 crores has been earmarked for setting up 10 lakhs family-size bio-gas plants. About 71,000 bio-gas plants are at the moment operating in the country. The Government is planning also to set up 100 community-size bio-gas plants as demonstration units.

Amongst the major sources of alternative energy, bio-gas is seen by India's onergy planners as the most promising at the current level of technological development.

The aim is to help villages become self-reliant for their fuel needs. By reducing the demand for firewood the bio-gas programme should also check deforestation and reduce the burning of cow-dung.

Bio-gas is mainly used for cooking but it can also be used for lighting, running diesel engines for irrigation and for generation of electricity. The use of bio-gas plants in villages, when linked to toilets, can also help in improving sanitary conditions.

Most of the funds allocated by the government will be spent on providing subsidies for the erection of family-size plants and for training people to construct them. Anyone setting up a family-size plant, gets a 25 to 50 per cent government subsidy. Community-size plants will probably be totally subsidised by the Government. But even this major programme will tap only a fraction of the country's total bio-gas potential.

According to Mr T. L. Sankar, the former Secretary of Planning Comission's working group on energy policy, in India cow-dung alone has a potential of 18.75 million family-size bio-gas plants and 5,60,000 community bio-gas plants, with a daily capacity of 1.7 and 142 cubic metres of gas respectively.

The one million target of family-size bio-gas plants under the sixth five year plan will, therefore, cover just five per cent of the potential capacity.

In order to realise the total potential, a great deal of research and development work is being undertaken.

Family-size bio-gas plants are beyond the purchasing power of over 80 per cent of rural families. Moreover, even if the government were to provide every family a bio-gas plant free of cost, the majority of families would still not have sufficient number of cattle to feed the plants. Only about 200 lakhs rural families own 3-4 head of cattle which is the minimum required to run a bio-gas plant.

There are, therefore, three major thrusts of bio-gas research in India, the first is to design and construct cheaper bio-gas plants using local skills and materials. The second is to find new feeds for bio-gas plants to supplement cow-dung. The third is to design and construct community bio-gas plants to suit even those who do not have cattle.

The most common design in India is the one developed by Khadi and Village Industries Commission (KVIC). It consists of an underground cement pit covered by a metal gasholder which floats over the gas produced in the cement pit by the fermentation of the cowdung. The metal drum in the KVIC design generally comes from an urban workshop.

A drumless design, known as the Janata model, has been developed by the Gobar Gas Research Centre of the Planning Research and Action Division (PRAD) of the Government of Uttar Pradesh at Ajitmal. The design is similar to the Chinese bio-gas plants. In this design, the gas holder and the fermentation pit are combined into one brick and cement structure. The advantages of this design are that it is as much as 50 per cent cheaper and it is possible for a trained villager to build the entire plant himself.

The Janata plant can also be built underground and water-hyacinth or some other feedstock can be cultivated on top of it.

But it is not possible to build community-size Janata plants. There are about 72,000 KVIC plants and about 2,500 Janata plants in the country. Technically, the main problem with KVIC model is the corrosion of the metal drum. In the Janata model, leakage can occur if it is not constructed properly.

The Application of Science and Technology to Rural Areas (ASTRA), Indian Institute of Technology (IIT), Bangalore, has modified the KVIC design so that it is possible to get gas within only 35 days of feeding the plant. The KVIC usually takes 55 days. The ASTRA has set up two plants on an experimental basis and claims that they are 40 per cent cheaper than the KVIC plant.

The A. M. M. Murugappa Chettiar Research Centre in Madras is designing a bio-gas plant in which the gas holder is made of PVC plastic.

The Structural Engineering Research Centre (SERC), Roorkee in Uttar Pradesh, has developed ferro-cement gas holders made of wire guage coated with cement.

The Tamil Nadu Agricultural University (TNAU) at Coimbatore has developed a mobile bio-gas plant.

Various institutions are experimenting in evolving substitutes for cement and steel. The KVIC itself is using lime pozzolana (a powdered mixture of slaked lime and brick waste) as substitute for cement for building the fermentation pit. This approach may reduce the cost of the plant.

Amongst the various new feedstocks that are being used in experimental plants are animal wastes like the excreta of cows, buffaloes, poultry, sheep and goats; human night soil; agricultural wastes like sugarcane trash, weeds, spoilt fodder and straw; and aquatic wastes like forest litter which mainly consists of twigs, barks and leaves.

The Punjab Agricultural University (PAU) at Ludhiana is using leafy materials like tree leaves, crop residues, fruit peels, chopped paddy and wheat straw to build what it calls *kachra* (waste) bio-gas plant.

The Indian Agricultural Research Institute (IARI) at New Delhi has been trying to use both animal and plant wastes. The National Sugar Institute at Kanpur in Uttar Pradesh, is utilising bagasse and cane trash. By adding methane-producing bacteria, the Maharashtra Association for the Cultivation of Science at Pune has made it possible to use dry oow-dung cakes.

Unfortunately bio-gas production slows down at low temperatures. People have higher fuel needs for making tea, etc during winter just when bio-gas output gets reduced. This is a major complaint in northern India.

To increase gas production during the cold months, the Regional Research Laboratory (RRL) at Jammu is experimenting with various solutions : building underground plants, adding solar-heated water and insulating the fermentation pit.

Several institutions are designing engines which can run on bio-gas for pumping water. A Poona-based private company, Kirloskars, is already marketing bio-gas engines in which diesel need have been cut by 80 per cent. The KVIC has designed an engine which runs solely on bio-gas. It, however, requires petrol to start.

There are only two community-size plants operating in Indian villages at present. The first community plant was located in Karimnagar district in Andhra Pradesh and went on trial run in 1977.

The second community-size plant has been built in Etawah district of Uttar Pradesh. The plant has been functioning since November, 1978. Gas from the plant is being distributed free to all the 27 households in this small village of 173 people. The earlier plan was to charge families for the gas depending on how many burners it used but later it was given free of charge as villagers were extremely reluctant to pay for it. They argued that cooking fuel previously cost them nothing.

Gas for cooking is supplied for 4-5 hours daily. Every family gets the same amount of cooking gas irrespective of the cow-dung it contributes. Burning of cow-dung has stopped and nearly all the cow-dung in the village is now used as manure. Gas was also used to power 17 street lights and 27 household electric connections for eight months in 1979 but then the generator had to be stopped because the villagers refused to pay for their electric connections : Rupees five per family per month for using up to two bulbs.

Gas is also being used to run a threasher, a flour mill, a chaff cutter and a tubewell. The villagers pay the current commercial rate in the area. About Rs 1,400 had been earned by end-1979 mostly from payments made by flour mill of higher capacity and oil-expeller, the revenue can be increased.

Research and Development efforts are needed to find cheaper pipeline materials for distribution of gas. It is also important to know at what point of the community's growth the distribution system starts becoming uneconomic.

According to Mr B. P. Ghate, the former Director of the Lucknow-based PRAD, the major problems with community-size plants are both technical and sociological. Organisational problems, like collection of dung and community financing of the plants, have to be studied in greater detail. Plants will be well maintained only when each member of the village community perceives it in his interest to keep it going. Voluntary organisations with village-based social workers will have to play an important role in the spread of community-size plants.

Most Gandhian rural development workers believe that bio-gas plants are extremely important because they represent a more rational utilisation of our country's community-based natural resources.

INDIAN DYESTUFF INDUSTRIES LIMITED

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NOTICE

To

The Members,

INDIAN DYESTUFF INDUSTRIES LIMITED.

NOTICE IS HEREBY GIVEN THAT the 27th Annual General Meeting of INDIAN DYESTUFF INDUSTRIES LIMITED will be held at Ball Room Taj Mahal Hotel, Apollo Bunder, P.J. Ramchandani Marg, Bombay 400 039, on 16th September, 1981 at 4.00 p.m. to transact the Ordinary and Special Business mentioned in the Notice dated 23rd July 1981 convening the said Annual General Meeting. The Annual Report and Statement of Accounts for the Financial Year ended 31st March, 1981 are being posted to the Members individually at their Registered Address along with the said Notice together with the Explanatory Statement.

NOTES :

1) A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND PROXY NEED NOT BE A MEMBER

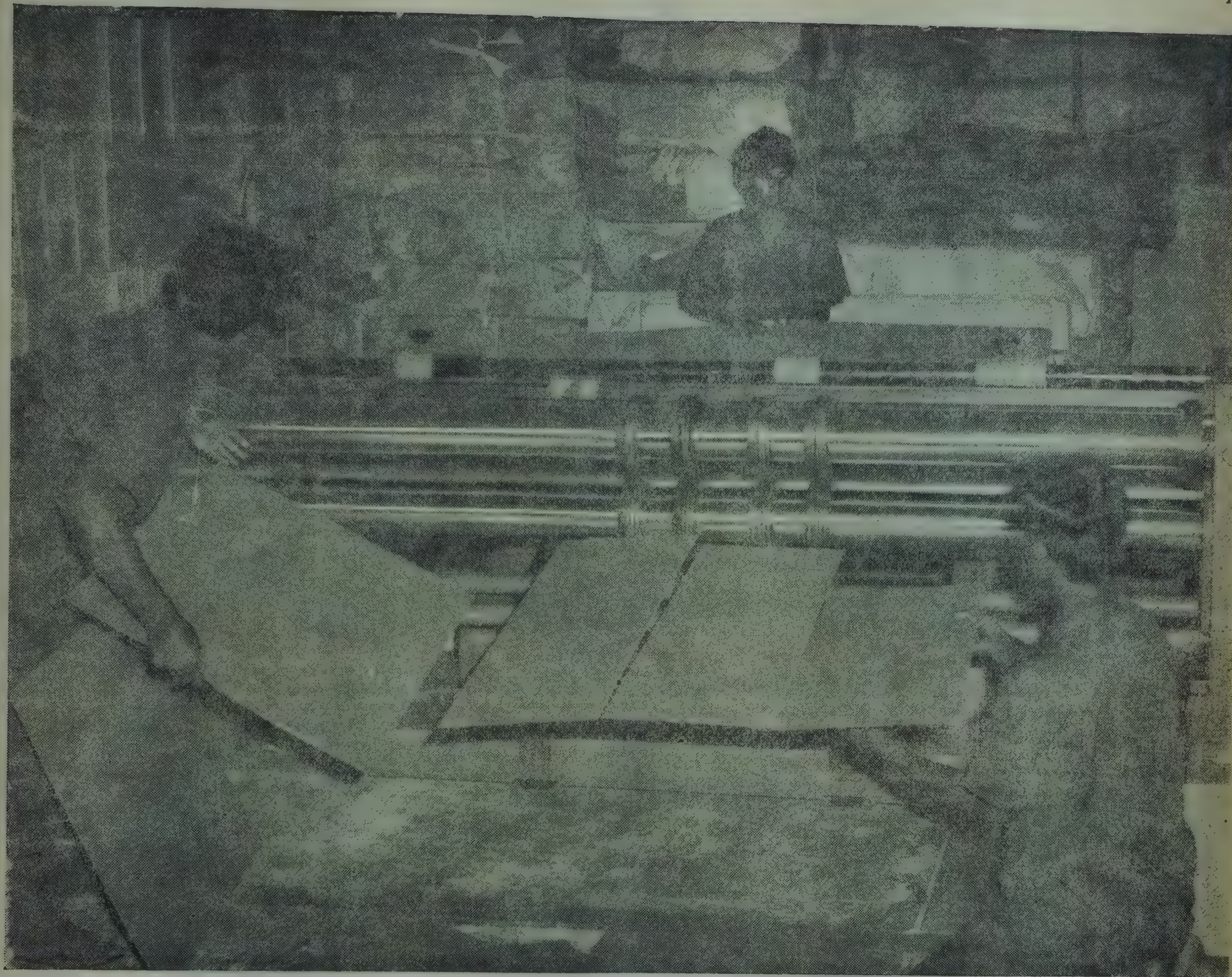
2) The Explanatory Statement relating to the Special Business mentioned in the Notice, as required under Section 173(2) of the Companies Act, 1956 is annexed to the Notice.

3) Members desiring to file Tax Exemption Certificate issued by the Income-Tax Officer or Statements in Form No. 14-B (in duplicate) pursuant to the provisions of Section 194 of the Income Tax Act, 1961 are requested to forward the same so as to reach the Company's Share Department at Rustom Building, 29, Veer Nariman Road, Bombay 400 023, on or before 4th September, 1981, in order to get the dividend without deduction of tax at source. It will not be possible for the Company to act upon such Certificates or statements received after that date. Blank Form 14-B will be supplied to the Members on request.

4) Members are requested to intimate to the Company change, if any, in their Registered Address

BY ORDER OF THE BOARD,
P. A. DESAI,
SECRETARY.

Bombay : 18th August, 1981.



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Paper industry : Need for fresh incentives

By PRASUN K. DHAR

PAPER usage is the economic indicator of a nation's development. *Per capita* consumption of paper in India is a mere 2 kg as compared to 289 kg in the USA and 151 kg in Japan. Even developing countries like Malaysia (37 kg), Brazil (26 kg), Vietnam (27 kg) and Turkey (13 kg) far outstrip India.

Production

Production of paper and board in India was about 10.8 lakh tonnes during 1980 as against an installed capacity of about 15.3 lakh tonnes, representing a capacity utilisation of about 70.6 per cent. According to official sources, capacity utilisation was adversely affected due to power shortage, bottlenecks in wagon movement and inadequate availability of coal. There was, however, a marginal improvement in capacity utilisation over 1979.

Demand

The working group on paper industry, set up by the Government of India in 1972, has examined, among other things, the likely demand in the perspective of subsequent two plan periods. Considering the relevant factors, the group estimated a 7 per cent growth rate in demand for paper. Their demand projection is summarised in Table 1.

Demand projections have also been made independently by Planning Commission, Pre-investment Survey-India, NCAER and Marketing Research Corporation of India, but most of the estimates are on the high side. The present demand is actually about 11-12 lakh tonnes.

Experts predict a world-wide paper shortage in 1980s. Even without adjudging the validity of their hypothesis, the present gap between demand and supply in India is of the order of one lakh tonnes. Planning on the basis of a five kg *per capita* consumption by the year 2000 AD, production will have to be at least five million tonnes. This is a staggering figure.

Growth

The industry got a tremendous fillip in the first decade of planning but the growth tapered off, as illustrated in Table 2.

Stockpiles of waste paper

The figures indicate that in later years, specially in seventies, there has been marked hesitancy towards fresh investment in the industry. Installation of fresh capacity during the last few years has been nominal. The main reasons are said to be as follows :

(i) Return on capital invested is not regarded as attractive (the existing control on production is considered to be a deterrent).

(ii) Long gestation period.

(iii) Inadequate incentive (Government has declared fresh incentives in form of fresh excise relief for new units and for usage of bagasse).

(iv) Huge capital investment (about Rs 12,500 per annual tonne).

(v) Scarcity of raw materials.

(vi) Rising cost of fuel and other inputs.

The above indicates that a better investment climate is needed by this industry to induce fresh capacity. This calls for incentives like soft loans, higher debt equity ratio and excise relief. (Dr Charanjit Chanana, Minister of State for Industries, had announced fresh incentives in Parliament on April 24 last which should be a welcome relief to the industry).

The National Council of Applied Economic Research has recommended setting up of larger units on economic grounds. The Working Group on Paper Industry has also favoured setting up of

Table 1 : Demand projection for paper industry

Item	Estimated demand in '000 tonnes 1978-79	1983-84	1988-89
1. Cultural Paper	745	1,020	1,350
2. Industrial Paper	585	840	1,250
Total paper and board	1,330	1,860	2,600
3. Newsprint	350	500	700

Table 2 : Growth and production of paper industry

Period	Annual growth rate	Annual Production increase rate
	%	%
1951-61	11.8	10.9
1961-71	9.1	8.4
1971-80	5.1	4.0

Mr Dhar is Manager, Management Services, The Titaghar Paper Mills Company Ltd.

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100 tonnes per day paper mills as the minimum viable size.

Capacity utilisation

The industry had an enviable record of capacity utilisation till 1970, but thereafter there has been a steady decline as is evident from Table 3.

Table 3 : Capacity utilisation in paper

Period/Year	Capacity Utilisation (%)
1951 — 1960	91.7
1961 — 1970	89.2
1971 — 1975	77.8
1976	79.3
1977	80.7
1978	78.0
1979	69.7
1980	70.6

Imports

With almost all common grades of paper and a large number of specialities being manufactured in the country, the import is limited to a few special items. During 1979-80 about 50,000 tonnes of writing/printing paper had to be imported to supplement the indigenous production which was short of demand. Since the demand has been steadily growing, the supply-demand gap is likely to widen further to the extent of at least 1,00,000 tonnes by 1982-83.

Two sectors

The paper industry had been basically in the private sector till the end of sixties. In 1975, the industry was included in the core sector and large industrial houses were allowed to participate in and contribute towards its development. Except for the production of newsprint, the entire production of paper and paper board is in the private sector.

Public sector entered the field of pulp and paper industry in May 1970 with the formation of Hindustan Paper Corporation Ltd, although it had been in the field of newsprint production, for example NEPA in Madhya Pradesh since 1958. Installed capacities and expected dates of commissioning of the four projects taken up by HPC are shown in Table 4 :

The total outlay for all these projects is likely to touch Rs 600 crores as against the original estimate of Rs 200 crores. Share of public sector in total production is likely to be about 10-15 per cent after the implementation of all the projects.

Raw materials

Bamboo and wood are basically the traditional raw materials for making paper. The other raw materials include agricultural residues like straw, bagasse, gunny, jute sticks and waste paper.

For the current production of 10 lakh tonnes of paper, total annual requirement of bamboo and timber would be about 19 and six lakh tonnes respectively. With increase in demand for paper, aggregate requirements of raw material for 1985, 1989 and 2000 will rise. However, it is expected that demand for bamboo between 1985 and 2000 will decrease comparatively, while that for coniferous and hard wood will increase substantially.

It has been estimated that total growth area of bamboo in the country is over 1 lakh sq km (100 lakh hectares) with an annual potential of 45 to 50 lakh tonnes. The estimated growing stock of wood is 46,600 lakh cubic metres. On the face of it, it may appear that there is paucity of wood whereas bamboo is available in plenty, but in fact it is just the reverse. The growth of bamboo is concentrated mainly in MP, Orissa, Andhra Pradesh, Karnataka and the north-eastern States. The bamboos from those states where infrastructure has been developed are earmarked for the industry, but a huge percentage of the total growth area lies in inaccessible and remote places. Since tropical pine plantations which were planned for Central India have not been fully achieved, lot of coniferous wood will not be available. Hence the projected demand of bamboo will rise and there is a likelihood of its shortage and not that of wood.

To solve the problem of raw materials shortage which looms over the industry, some of the suggestions are:—

1. A rational development and exploitation of forest policy by the Government, in consultation with the industry.

2. Adequate financing for development of forestry sector.

3. Exploitation of land by silvicultural operations including afforestation.

4. Prevention of theft and unauthorised felling of wood.

5. Sponsoring and promoting socio-industrial forestry programmes in joint sector. The Titaghur Paper Mills have taken a lead in this area.

Paper machinery

Manufacture of pulp and paper making machinery started only in 1960. There are 27 units licensed and nine units registered with DGTD for manufacture of paper and components of paper machinery. Indigeneous manufacturers are capable of fabricating complete pulp and paper plant of 150/200 TPD capacity. There is large idle capacity in the industry and there are no encouraging signs for the eighties, basically due to continuous recession.

It is believed that though an old imported machine costs about one-tenth of a new indigeneous machine, cost of rebuild, import duty, increased cost of input, lower yield etc make old imported machines a costlier proposition.

The existing facilities are adequate to build mini-paper plants of 10-30 TPD production.

Research and development

R&D is a vital function of any industry, continuous research is essential to update technology, facilitate innovation and encourage development. R&D should cover process design, process improvement, product improvement, diversification, minimisation of pollution, silviculture, import substitution, energy conservation etc. Stress should be laid on problems of vital national and international importance, like energy conservation high-yield pulping, quick-growing species etc.

Titaghur Paper Mills are carrying out intensive research work in various fields at their well-equipped R&D laboratory. Other Mills are also doing useful work.

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Table 4 : Projects of Hindustan Paper Corporation

Project	Installed capacity (Tonnes per year)	Expected year of completion
Nagaland	30,000	1981
Kerala	80,000	1981-82
Nowgong	1,00,000	1983
Cachar	1,00,000	1984
Total :	3,10,000	

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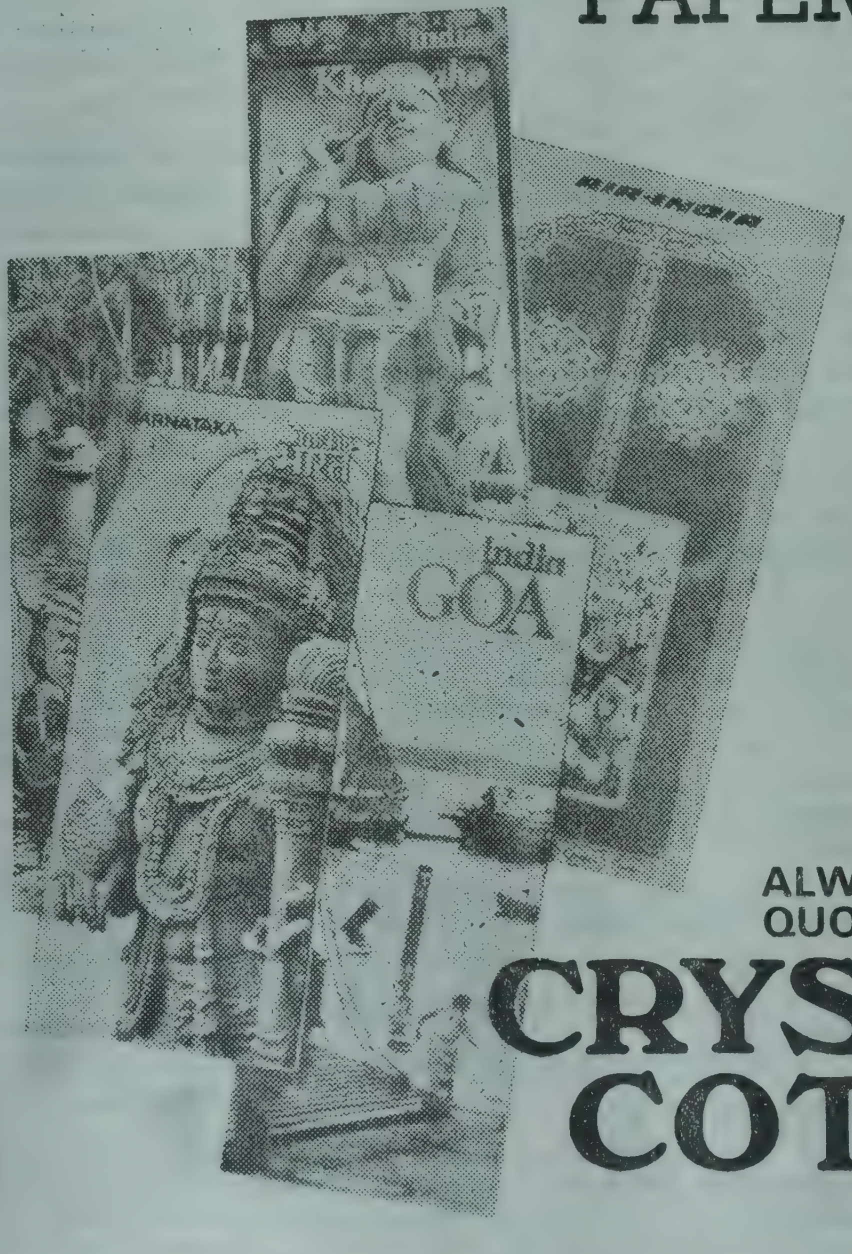

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Man-made forests: some basic issues

By I. M. BHANDARI

THE future of the paper industry has been adversely affected by inflation as well as shortage of basic raw materials. Increasing cost and shortage of coal, power, wagons, raw materials and chemicals have hit the industry very hard.

The current production of paper and board by end of 1980-81 would be around 10.50 lakh tonnes as against the installed capacity of 15.38 lakh tonnes. Although original estimate of the Planning Commission gave the demand for paper and board at 11.03 lakh tonnes by 1980-81, the figure has been revised to over 12 lakh tonnes now, increasing to over 16 lakh tonnes by 1984-85. The shortfall in supply is alarming and one of the reasons for the poor growth of the paper industry is shortage of proper type of pulpable raw material.

Forests in India occupy an area of about 75.2 million hectares, nearly 24 per cent of the total land area of the country and the current consumption of hard wood is around 18 lakh tonnes while the actual need would increase with the growth of the paper industry. Compared to agriculture, the contribution of forestry to the national income is quite low. In spite of substantial allocations of funds under the five-year plans, the current production of wood from forests is many times less than the potential productivity of the forests.

It is gathered that the scope for raising the production capacity of forests is at least 20 times more than the present production. However, it is possible to increase the forest output by adopting measures for better conservation, management, tree improvement, irrigation and fertilisation. It is, therefore, imperative that separate working plans be drawn up for pulpwood supply instead of keeping the same annexed with general forest development programmes which will, to a great extent, solve the problem of supply of cellulosic raw material to the paper industry.

The paper industry requires young suitable wood of uniform size for pulping at economic landed cost. A large quantity of pines and hard wood and bamboos are not being utilised due to inaccessible terrain. This wealth cannot be usefully exploited unless proper communications are developed in difficult terrain at a high cost. But not only the availability, the economics of extraction and delivery at mill site of suitable quality of wood are also much more important.

To solve this problem, creation of man-made forests is suggested. This is a gigantic venture in itself. Considering the needs of future requirements of the paper industry, plantation of one million hectares of bamboo and one million hectares of pulpwood is proposed and for this, funds to the tune of Rs 350 crores may be needed in addition to the huge cost involved in building roads and extraction paths to inaccessible areas in order to make it possible to extract the virgin forest of woods and bamboos.

Both the Central and state governments are actively engaged in promoting

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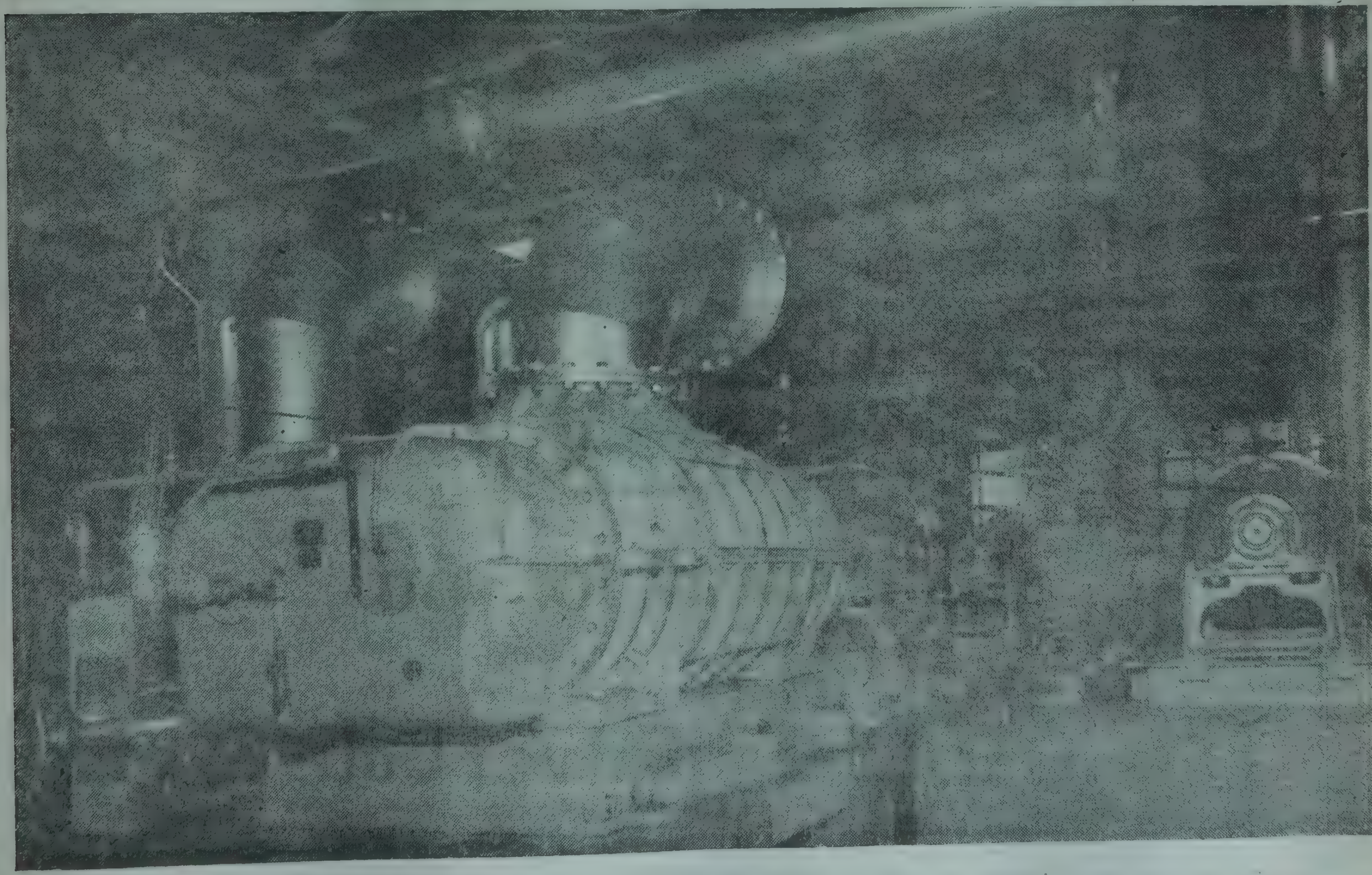
Mr Bhandari is the executive vice-president of Orient Paper Mills.



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man-made plantations in the country. The National Commission of Agriculture, in its interim report, "Production Forestry—Man-made Forests" recommended dynamic changes in the forest policy for the country and it was found that around Rs 850 crores would be needed during the Fifth Five Year Plan for development of forestry. Nevertheless, the progress in this regard during the last decade has been very poor and except for new areas, no large scale afforestation programme has been undertaken.

Plantation projects need industrially-oriented infrastructure. Their implementation will be rather difficult departmentally by the state governments because of problems of labour laws, wages, management control and investment returns. Such projects can be better organised by autonomous quasi-government bodies or by the joint sector or the private sector. But before any such programme is successfully implemented, certain thoughts in this regard need to be emphasised Some of them are mentioned below.

Since man-made plantations involve large sums for a long period, return from them should be attractive enough to the investors. Unless this is made possible, no amount of persuasion or compulsion will make the capital flow in for such projects. This needs a serious thought by all experts of forestry financing and the government, and a rational approach is called for. The cost of bamboo with a spreadout rotation cycle of four years and life of 40 years would come to Rs 550 per tonne. Taking normal bleached pulp yield of 38 per cent on a.d. weight, bamboo (assuming 10 per cent moisture) cost of raw material per tonne of pulp itself will come to Rs 1,450. By no stretch of imagination can the industry bear this high cost of raw material.

The question of rent for the land for such plantations also needs careful consideration. Since raising of plantation takes time before it is ready for exploitation, initial heavy expenditure on its establishment has to be sunk by the industry. A suitable formula may be developed to charge land rent with the exploitation-rotation of each plantation so as to impose minimum burden on the industry and help initial stages of development.

A serious drawback in bringing up planned plantations of fast growing pulpable species is lack of technical know-how. It is necessary that every state has a full-fledged forest research centre of pulpable woods and silvicultural practice. These centres should be accessible to the industry as also to the forest officers. This would help bring up plantations on economic lines. Unless fast growing species yielding wood of suitable quality for pulping and accommodative to local climatic and soil conditions are planted, it will be difficult to achieve the desired object of raising industrial plantations. Thus, extensive studies in forestry science for each locality and particular species to be grown there are needed.

Man-made forests should be more intensive than extensive. Commercial exploitation always calls for higher yield, improved quality and processing economy. Since our forests have very poor yield, and raw material is not available in concentrated areas, it is necessary that before plantations are raised, basic principles of their layout, selection of site and species, ecological effects and industrial economy are well understood and accepted both in policy and principle.

Besides bamboo, selected fast growing species suitable for paper making such as *eucalyptus, Gmelina arborea Acacia auriculiformis, Melia azederach Ailanthus, Leucena glauca, paper mulberry, poplars, Sesbania grandiflora, Hibiscus canabinus* (*kenaf*), *Tropical pine* and similar others should be preferred to other plantations for the paper industry. *Prosopis juliflora* may be grown extensively in arid and degraded lands where regular plantations may not be possible. Younger trees give suitable woo for chemical grade pulp as found by us With smaller rotation cycles, the overal investments are low and the industry ca get best returns from such plantations whereas plantations of longer rotatio create many problems of managemen and investment.

Care should also be taken to selec sites for industrial plantation as near t consuming unit as possible, thereby helping to reduce the cost of raw material for industrial use. As far as possible, th distance from consumer units should b kept within 80 kms so that the costs c transport facilities, conveyance and management are effectively and economicall managed.

BAGASSE

Problems of switch-over

By Our Industrial Correspondent

TRADITIONAL sources of raw materials for paper manufacture are becoming scarce in this country. The obvious solution to this problem is the use of non-traditional materials like bagasse, hard wood, cereal straw, agricultural residues, cotton rags, cotton linter and waste paper. But the difficulty with most non-conventional materials is that they are not available in adequate quantities to sustain the working of a paper mill of normal size. However, India produces sufficient bagasse for paper manufacture. Its use as an alternative to bamboo for pulp production has thus been considered for a long time. It is theoretically possible to produce a million tonnes of paper from bagasse now being burnt as fuel by sugar mills in the country. Why then has the process of manufacturing paper from bagasse not got under way?

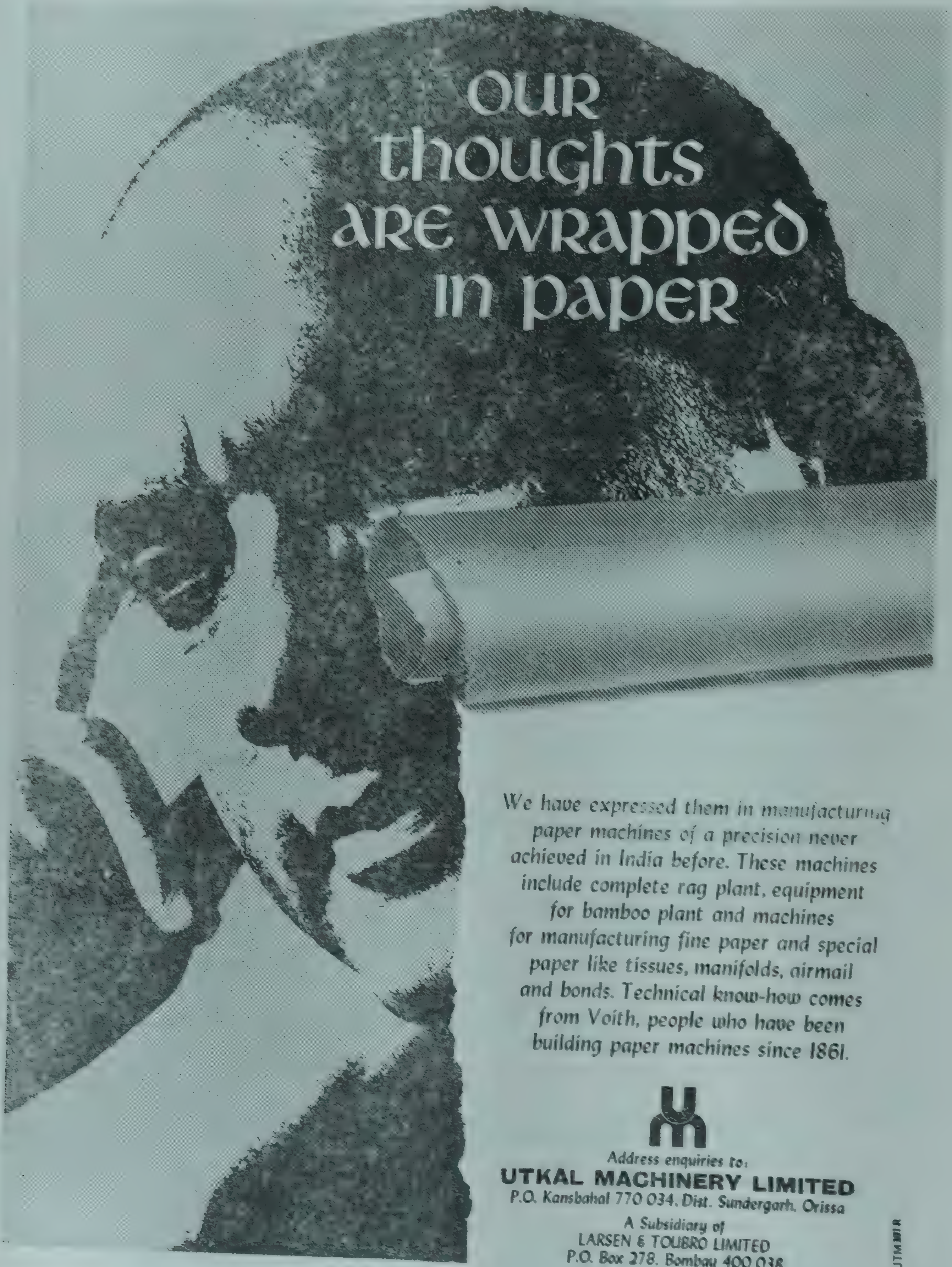
The Government has evolved a set of policy measures to promote the use of bagasse for paper production. Financial institutions have been directed to give priority assistance to such schemes. Excise rebates have been offered to units manufacturing paper from bagasse.

Several problems have held up the shifting of paper production from bamboo to bagasse. Sugar mills use bagasse as fuel and their boilers have been specifically designed to burn bagasse. If they are to release bagasse to the paper industry, their boilers would have to be revamped and coal- or oil-fired boilers would have to be installed. Coal and oil boilers are more expensive, and, while oil is scarce in the country, there is no guarantee that coal supplies for sugar factories will be ensured even though we have abundant coal resources. The experience of the cement industry has been a bitter one. The costs of conversion and transport of coal and oil are sufficient to deter sugar mills from making such a switch

Moreover, the proper technology for has not yet been evolved depithing bagasse for its use as a raw materia Bagasse is relatively high in pith conter (30 per cent). After the separation c pith, bagasse is pretreated and refine under heat and pressure conditions ar reduced to fibre. The process of reducir bagasse to fibre is relatively easy. It ca be achieved by installing pressure re ners and auxiliary equipment in existir sugar mills. It does not demand separa infrastructural facilities.

Another problem arises from t bulky nature of bagasse. It is availab for only six months during the suga cane crushing season. Paper mills usi bagasse as a raw material would th have to store their requirements of ba asse and this poses some problems. Va ations in cane supply position from s son to season, cane quality and fibre c tent also make the planning of pulp ur by sugar mills difficult.

But, all these problems can be solved if the intent to use bagasse paper production is strong enough. O sugar mills would need stronger inc tives to sell their bagasse to paper m or to themselves to undertake pulp p duction.



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Turning a new page in paper industry

By K. JAYABHARATH REDDY

ANDHRA Pradesh, which is well known for its predominance on the agricultural front with its self-sustaining agricultural economy, is now emerging as an equally important industrially developing state on par with several other industrially developed states like Maharashtra, Gujarat, West Bengal and Tamil Nadu.

The encouraging and attractive industrial investment climate, the favourable governmental policies, the multi-pronged timely assistance extended by the different state level promotional organisations and, more particularly the vital catalytic role played by the premier industrial promotional organisation —the Andhra Pradesh Industrial Development Corporation (APIDC) — congenial labour relations, and a comfortable power position are some of the important factors responsible for the accelerated industrial activity in the State.

APIDC, set up by the Government of Andhra Pradesh for planned and rapid industrialisation of the State, has set a record achievement in the field of industry and the Corporation's stress on new dimensions of development in the different fields of industry have helped the State to turn a new page in the industrial chapter of the country.

The industrial spectrum of the corporation's projects include a large number of natural resource-based industries like paper and straw board mills.

Wealth from waste

The corporation's endeavour to fully utilise the rich agricultural resources, including the agricultural wastes/residues which were hitherto unutilised and wasted, has now become an important plank for industrial activity in the State, leading to the growth of paper and board industry.

Till 1975, there were only two large forest-based paper mills in the State namely A.P. Paper Mills Ltd at Rajahmundry in East Godavari district and Sirpur Paper Mills Ltd at Sirpur Kaghaz Nagar in Adilabad district, with an installed capacity to manufacture 60,000 to 70,000 tonnes per annum utilising the bamboo and hard wood resources of the State. Of these two mills, AP Paper Mills is being assisted by the Corporation, which has now a licensed capacity of one lakh tonnes of different kinds of paper, utilising about one lakh tonnes of bamboo and an equal quantity of hard wood.

First mini paper mill

In 1975, APIDC extended all-out assistance to a group of young entrepreneurs, having nearly a decade's experience in different capacities and aspects of paper making and management in a major paper mill in the State and who had left their lucrative jobs and had come up with a proposal to set up a mini paper plant in a rural area near Rajahmundry, Kadiam, in East Godavari District, a rich paddy growing area of the State, by utilising the abundantly available paddy straw and other agricultural residues like jute waste, cotton linters and waste paper for the manufacture of 2,500 tonnes of paper. It was in line with the corporation's endeavour not only to utilise the agro resources for industrial purpose but also to build up a self-sustaining local entrepreneurial base.

Besides supporting this proposal APIDC took up this project proposal to the Industrial Development Bank of India which, after a thorough examination of the proposal by an expert committee of paper makers, agreed and participated in shaping the first mini paper mill in the State, a joint venture of APIDC *viz.* the Coastal Papers Ltd. As a first venture of its kind in the State it received full support of public investors whereby the company's public issue was over subscribed. The technocrat combination of this unit had the added advantage of having their own designs, locally fabricated plant and machinery and the project cost not exceeding Rs 98 lakhs. They got the unit commissioned in a record time of 18 months. Additional success was obtained by achieving full production capacity and declaring a dividend in the second year of its operation. It is this successful

Mr K. Jayabharath Reddy

experience that has triggered the growth of paper industry and prosperity to all those concerned.

Growing demand for paper

There is an imperative need to meet the ever-growing demand for printing and writing paper in the country, promoting new paper mills by utilising the forest resources like bamboo and wood as well as the secondary resources like straw, jute/gunny wastes, cotton linters etc.

The spread of education, increased literacy standards, tremendous growth in the printing and publication industry, numerous newspapers big and small, and a tremendous increase in magazines and journals has enormously increased the demand for printing and writing papers. Simultaneously there has been an increase in the demand for wrapping and packing papers including paper board for industrial use.

The Sixth Five Year plan of the country has indicated that the demand for paper/paper board is estimated to increase from 1.1 million tonnes in 1979-80 to 1.54 million tonnes by 1984-85. The capacity and production targets envisaged for 1984-85 are 2.05 million tonnes and 1.5 million tonnes respectively. The plan also envisages the additional capacity to be set up largely through establishment of small sized paper mills based upon secondary raw materials.

It is in line with the Government of India's plan document that the APIDC has encouraged entrepreneurs to set up mini paper mills utilising agricultural wastes.

Efforts of APIDC

As a result of the catalytic role played by the corporation for promotion of paper mills not only based on the

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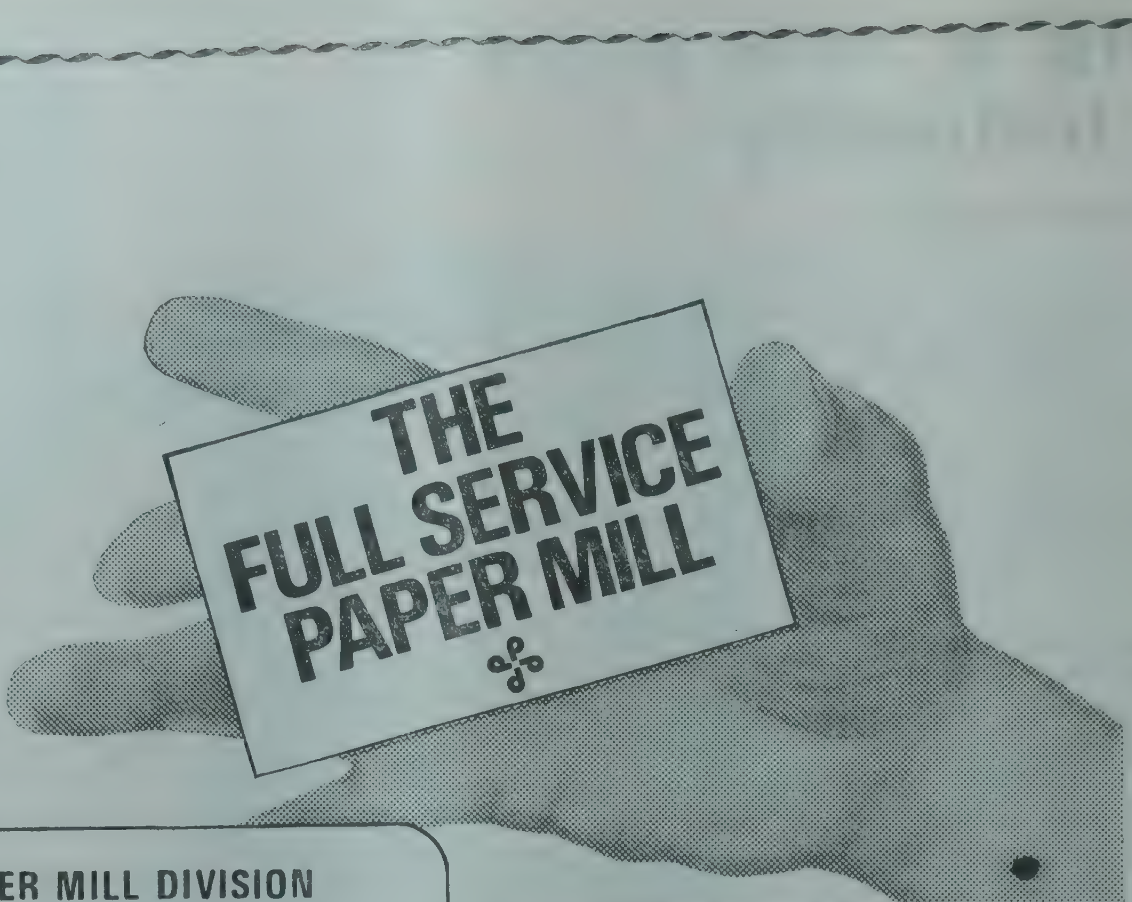
Mr Reddy, IAS, is vice-chairman and managing director of Andhra Pradesh Industrial Development Corpn Ltd.



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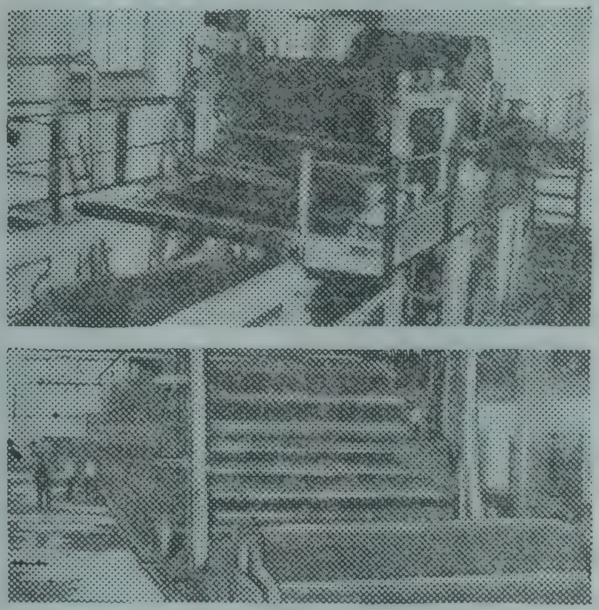

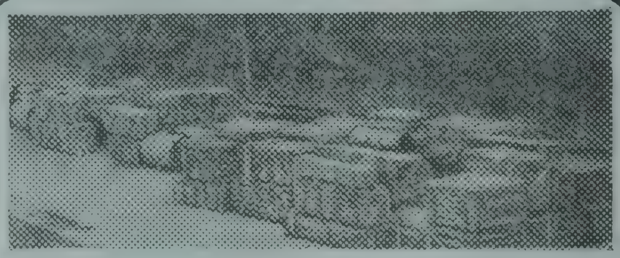

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forest resources like bamboo and debarked wood, but according highest priority to those entrepreneurs who have come up with proposals to set up mini paper mills based on the secondary raw materials like agricultural residues/wastes, like paddy straw, waste paper, gunny bags, cotton waste, baggasse etc for the manufacture of printing and writing paper, Andhra Pradesh has been placed on par with States like Maharashtra as far as the number of units is concerned.

As on date there are four large mills located one each in East Godavari, Kurnool, Khammam and Adilabad districts producing paper on a large scale utilising the bamboo and hard wood resources of the State. Out of these four units, three projects were promoted by APIDC; of this, one is in Joint sector with a project cost of Rs 47 crores. The industrial investment generated in these large mills will be of the order of Rs 126.10 crores, of which Rs 4.73 crores has been the corporation's share of investment.

In addition to these large mills which have already gone into production, the corporation is actively contemplating to set up the Kakinada pulp/paper project with an investment of the order of Rs 150 crores, based upon Andaman woods. Effective steps like preparation of market report, preparation of raw material report, location survey report, etc, have been completed in association with the Food and Agriculture Organisation of United Nations. In view of the huge investments involved, discussions are in progress with the concerned ministries to get the necessary assistance from an international organisation like United Nations Development Fund. When this project goes on stream, the unit would be able to manufacture one lakh tonnes of printing and writing paper per annum which will go a long way in combating the shortage of this important commodity.

Mini paper mills

The corporation has also been encouraging entrepreneurs who come up with proposals for setting up mini paper plants based on the secondary raw materials like the agricultural residues and wastes. As on date four mini paper plants are in production with a licensed capacity of the order of 30,500 tonnes per annum. The investment involved in these projects is of the order of Rs 15.41 crores. The corporation's share of investment in these projects is Rs 1.08 crores.

The corporation has encouraged 11 more entrepreneurs who have come forward with proposals to set up mini paper plants in different parts of the State, majority of them based on locally-available agricultural residues. However, two out of these 11 projects will utilise the commercial grade pulp sold by the Central Pulp Mills, a public sector undertaking. The licensed capacity of the mill under implementation is of the order of 67,525 tonnes per annum involving an industrial investment of the order of Rs 34.57 crores. The corporation's share would be about Rs 2.36 crores. By the end of 1983, almost all these mills will go into production.

The corporation has promoted so far five straw board mills, of which three have already gone into production with an installed capacity of 8,500 tonnes per annum involving an industrial investment of Rs 1.41 crores with corporation's share being Rs 16 lakhs. The other two mills have recently been accepted by the corporation for promotion with a capacity of 6 lakh tonnes per annum and with an investment of Rs 1.85 crores. These mills would utilise the abundantly available straw in the respective locations.

Raw materials

The principal raw materials like bamboo and wood for large paper mills come from the rich forest resources of Andhra Pradesh. The three paper mills promoted by the corporation consume as much as 2 lakh tonnes per annum of bamboo and 2.1 lakh tonnes per annum of hard wood valued at about Rs 12.30 crores.

The State has a forest area of 64,154 sq km, spread over 10 districts of the State. The raw material requirement of these major paper mills is met from the forests of East and West Godavari, Khammam and Bhadrachalam, and the Nallamalli forest range.

As a result of the sustained demand for the bamboo and hard wood by these major paper mills, the Andhra Pradesh Forest Development Corporation, an undertaking of the Government of Andhra Pradesh, is going in a big way in creating manmade forests for bamboo and hard wood supply in a phased manner. Till the end of July 1980 an additional land of 6,622 hectares has been brought under bamboo forest plantation.

The corporation has taken up an industrial plantation programme in a phased manner in the different forest range areas with a tie-up with the consumers. The corporation has drawn up perspective plans up to 2000 AD for different varieties of plantations like bamboo, teak, eucalyptus and other pulp woods.

The principal raw materials utilised by the mini mills in making paper are agricultural residues/agricultural wastes and other wastes.

It might be of interest to note the four mini mills in production will consume 55,500 TPA of paddy straw, 10,000 TPA of waste paper, 7,600 TPA of jute/gunny waste and 8,500 TPA of cotton linters for producing 30,500 TPA of printing and writing papers.

Out of the 11 mini paper mills at various stages of implementation nine units will ultimately consume 84,000 TPA of straw, 27,200 TPA of waste paper, 17,000 TPA of jute/gunny waste and 8,600 TPA of cotton linters for producing 67,525 TPA of printing and writing papers.

Straw board mills

The five straw board mills consume paddy straw of the order of 20,000 TPA, producing 14,500 TPA of boards. Besides the five mills supported by APIDC, there are a few more straw board mills in the State.

Andhra Pradesh being an agricultural State with more than 36.62 lakh hectares under paddy cultivation, with an average yield of two tonnes of paddy straw per hectare on single crop basis can keep up the abundant supplies of straw for industrial purposes, besides meeting the cattle fodder needs.

The process of encouraging entrepreneurs to set up paper mills based an agricultural wastes has improved the tempo of creating new employment avenues to the local people in various categories on the shop floor. The three major paper mills provide employment to more than 6,000 persons and the mini mills in production to 1,000 persons. The ultimate employment figures in these paper board mills would be more than 15,000. 15,000.

Besides the shop floor employment avenues many more employment opportunities are created in the connected acti-

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vities like forestry, raw material collection/processing activity, transportation, and ultimately to a large number in the downstream industries.

Entrepreneurial base

The creation and strengthening of a strong and sustained local entrepreneurial base is achieved to a reasonable extent in promoting these paper mills.

The establishment of a chain of agro-based mini paper mills has once again strengthened the theme that "a developing state is one which creates wealth out of its waste while an underdeveloped state is one which wastes its wealth."

The setting up of paper mills in the green belt of the State has resulted in bubbling new economic activity. The benefit of industrialisation has started reaching the rural folks by reducing the regional imbalances and employment avenues round the year unlike the seasonal avenues.

Contribution to economic development

Today AP's contribution to paper production is of the order of 2.22 lakhs TPA which would ultimately reach 2.90 lakhs TPA by the end of 1983. With the commissioning of the Kakinada pulp project, this would further go up to 3.90 lakhs TPA. The value of paper produced by the three major mills and the 14 mini mills would be of the order of about Rs 141 crores. In this process of paper making the paper mills will consume straw valued at Rs 2.23 crores, waste paper worth Rs 7.40 crores, jute waste Rs 2.92 crores, cotton linters Rs 3.74 crores, bagasse Rs 2.23 crores and purchased pulp Rs 72 lakhs. The quantity and value involved in the variety of wastes has created a new tempo in new areas of economic activity.

These paper mills contribute substantially to the Central and State exchequers in the form of Central excise, sales tax, etc.

Growth of paper/paper boards is one of the developmental dimensions of APIDC. It has to its credit as many as 280 large and medium industries involving an industrial investment of Rs 1,126 crores and covering a wide variety of projects like rayon grade pulp, laminated particle boards, plywoods, agro and forest-based industries, ferrous and non-rous engineering, electronic, chemical and a host of mineral-based industries.

Paper/Straw Board mills promoted by APIDC

Sl. No.	Name of the Project	Category	Project cost (Rs. lakhs)	Corporation's share(Rs lakhs)	Employ ment (Nos.)	Licenced capacity (TPA)
I.	**Paper Mills in Production :**					
1.	A.P. Paper Mills Ltd. East Godavari Dist.	A	3000.00	14.95	3579	100000
2.	Sree Rayalaseema Paper Mills Ltd., Kurnool	J	4700.00	312.90	1577	42000
3.	Bhadrachalam Paper Boards Ltd. Khammam	A	4910.00	145.00	1050	50000
4.	Coastal papers Ltd. East Godavari Dist.	J	498.00	20.00	154	9000
5.	Delt paper mills Ltd West Godavari Dist.	J	440.00	41.60	363	9900
6.	Suryachandra paper mills Ltd. East Godavari Dist.	A	198.57	7.00	195	4400
7.	Kolleru papers Ltd. Bommulur. Krishna Dist.	J	405.00	39.96	296	7200
			14151.57	581.41	7214	222500
II.	**Paper Mills under implementation :**					
1.	Kakinada Pulp & Paper Ltd E.G.Dist. ..	S	15000.00	500.00	3000	100000
2.	Sri Raja Rajeswari Paper Mills Ltd., Bapulapadu, Krishna Dist.	A	98.24	4.00	100	3300
3.	Circar Papers Ltd. Nellore Dist. ..	J	600.00	52.00	550	9500
4.	Sanjeeva Paper & Pulp Prakasam Dist	A	188.00	8.00	300	4950
5.	Vamsadhara Paper mills Ltd. Srikakulam Dist.	A	193.00	13.00	200	4950
6.	Pennar papers Ltd. Cuddapah Dist	J	195.00	19.27	150	4950
7.	Kurnool Papers Ltd. Kurnool Dist.	J	340.00	31.00	500	9000
8.	Telengana papers Ltd. Khamam Dist.	J	595.00	46.80	300	9900
9.	Adivasi papers Ltd. Khammam Dist.	A	180.00	10.00	250	4950
10.	Charminar papers Ltd. Medak Dist.	J	86.34	10.47	125	2000
11.	Nagarjuna papers Ltd. Medak Dist.	J	180.00*	11.61*	150	4125
12.	Laxmi Saraswati paper mills Ltd	A	1090.00*	40.00*	1000	9900
			18745.58	780.74	6625	167525
III	**Straw Board Mill in Production :**					
1.	A. P. Straw Boards Ltd. West Godavari Dist.	A	45.00	5.00	150	3000
2.	Pulawarthi Straw Board West Godavari Dist.	A	50.00	5.50	200	3000
3.	Sree Rama Straw Boards Nalgonda.	A	46.24	5.50	90	2500
			141.24	16.00	1250	8500
IV.	**Straw board Mills under implementation ·**					
1.	Kalyani Straw Boards Limited, Nalgonda	J	95.00	8.00	100	3000
2.	Kaleswarao & Associates, Samarlkota. E.G. Dist	J	90.00	8.00	100	3000
			185.00	16.00	200	6000

A = Assisted
J = Joint venture
S = Subsidiary
TPA = Tonnes per Annum
* = Project Cost Revised

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Paper-based packaging for cost reduction

By M. R. SUBRAMANIAN

IN today's context, a package is an inseparable part of the product. Paper-based packages are thus not end products in themselves, but they form part of the product (contents) intended to be packaged. In a printed package the quality of the package is determined by how effectively it communicates the quality of the product.

A package is required to meet the critical needs—*the identified critical needs*—of the product system, of which the package itself forms part, e.g. the shape of the package has a distinct relationship with the contents and influences the marketability of the contents.

So far the technological needs of the product, *viz.* of the product composition and its physico-chemical characteristics, have been the main points for consideration. But today's successful package would have to meet the needs of the product system including package processing, storage, transportation, distribution, merchandising, etc. It must be recognised that the packer/user of the package is not necessarily aware of the role of packaging as an integral part of the product system he intends marketing. For example, while he may know that grapes are saleable in 250 gm pack of paper board in the Gulf, he is certainly not aware of all the elements involved in the effective marketing of the product in the Gulf particularly relevant to the package. While large-scale national and transnational organisations may claim to have the ability to interpret the product system needs in terms of packaging material needs, the vast majority of industry and trade in the country may have to be helped in realising the basic elements of the successful system. This is true of India as much as it is true of every developing country. The growth of paper-based packaging business depends on how effectively this is done by those concerned in the trade.

Another example may also help. The undertaking of a promotional programme of selling tea in airlines to international passengers may at once bring into focus the need for a light weight package and, therefore, paper-based packaging. The emotional needs of the consumer who would like to have their premium tea in metal or metal like containers may lead to a proper analysis of the needs, so that market may develop for the intended product through an appropriate form of packaging identified.

Likewise the gift wrapping of popular Indian sweets can easily shift from the traditional mill board system to attractive pulp board/duplex board systems, provided the packer can be familiarised with the ultimate needs and fitness for the purpose. Here the satisfaction of the emotion is a more important criterion than low cost.

Packages intended for high speed operation in an automatic line would require superior functional characteristics and qualities such as of close tolerance in dimension or of stiffness and costs will have to be related to the cost of bottlenecks in production avoided through the use of appropriate materials. Thus cost reduction concepts must first take into account the intended use and the purpose.

Specifications

The system of ordering materials by a vast majority of the industry in the country relies heavily on the material specifications. Perhaps other criteria must have been tried and abandoned. However, the continuous growth and expansion of any industry including paper packaging industry, depends upon how effectively it can meet the needs of the user. A mention has been made earlier that not all the users are familiar with the needs and, therefore, it becomes the responsibility of the suppliers of the packaging material in this case to identify the user needs—in fact, the end-use needs.

The analysis of the end-use needs would at once bring out the necessity for identifying the performance expected of the material or the package. The benefit from this analysis is discussed in the following section, but if such analysis is not carried out, there is a heavy dependence on trying to describe the material and its characteristics for purpose of purchase. In this context, there are a minimum of three important factors, which help the buyer in avoiding unwanted specifications or unfulfillable specifications. They are:

(a) The limitations of the basic raw materials in a sellers' market.

(b) Process capabilities of the source;

(c) Quality control systems of user. Quite often it is seen, that the characteristics of the converted package cannot be maintained because of large scale variations in the quality of the raw materials, particularly in a scarce situation. It is quite obvious that ultimate performance value cannot be maintained.

The process capability of manufacture varies from one unit to another, and where price is the only guiding factor for purchase by user, it stands in the way of evaluating the quality and the capability of the source. This leads to a paradoxical situation where specifications are found in the purchase order and not in the purchase. A drastic conclusion that could be drawn is that if the unobtained specifications were eliminated, a more economical purchase would have been possible.

The systems of quality control do not quite often form part of the purchase specifications. Two kinds of situation arise as a result—supplies not meeting the specification are accepted or supplies meeting the specifications are rejected. It is quite possible that suppliers who are not familiar with the lacunae are unable to sustain the business. The purchase specifications for packages continue to describe only factors connected with the package. The details of contents and of the transport packaging are not indicated in the specifications.

The loser is obviously the purchaser for he does not benefit from capability of the supplier who has a knowledge of a very large cross-section of the users to provide suggestions for modifications of specifications, leading to the profitability of the users' business and of expanding markets possible with lower costs as a result. Surprisingly most suppliers do not seem to enquire into the details of the uses, with the objective of assisting the buyers in mutual interest.

It would be interesting to raise some questions:

Is grammage a necessary specification?

Is stiffness of board or stiffness of crease more important to high speed operations or pack seal failure?

Is gloss a criterion in higher value product packaging?

Mr Subramanian is acting director of Indian Institute of Packaging.

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along with Waste Paper.

How relevant is the source of paper board?

How important it is to prescribe the printing process when printed result is what one needs to verify?

Is it necessary to specify a lining material or is it better to indicate the guarantee for use?

By providing an indication of the use of very strong shipping container in the purchase order is it possible to obtain a suggestion for reduction in the specification for board used in the folding carton?

Value analysis

Cost reduction is always considered to be synonymous with value analysis or value engineering. This understanding, rather misunderstanding, has been responsible for reduction in cost at the cost of quality. An objective approach would be to enhance the value of a product system by (a) enhancing the quality and maintaining cost (b) enhancing quality at marginal additional cost (c) reducing the cost and maintaining quality.

The worth of the product is always determined by asking questions with regard to the functions the product performs. This can be equally applied to the functions of the package. It is desirable to raise the question connected with the product as well as the package in order to arrive at the sum total quality. Examples can be easily found in cosmetics, gifts, consumer durables, etc though this analysis is applicable to the entire gamut of packaged product. The question usually asked to begin with are: (a) What does it do? (b) What else can do the job?

In order to attempt answers to these seemingly simple questions, the packer is required to be armed with a whole lot of information. The more specific the information, the greater the chances of economic alternatives. If an exercise of the nature is undertaken, it would lead to a proper assessment of the use needs and the package performance needs. For example, when the need for printing on cartons containing shrimp was discussed in the United States, it was revealed that an improved presentation could lead to an increase in the per unit price about which the user in India was unaware. Thus, the potential for improved, rather higher cost packages was discovered by analysis of this nature even though the general belief in the industry would be that the maintenance of low cost was the only criterion in a competitive situation.

The relevant questions which may be asked in exploring potential for value improvement would include:

(i) can the functions required to be performed in a metal or glass container be performable by a paper board, or lined carton or composite container system? *e.g.* tooth powder, edible oil.

(ii) can plastic laminated printed boards offer a premium brand of a product or raise its status *e.g.* ready to wear garments.

Packaging developments

Of interest to the paper-based packaging producer are the changes that are taking place in the direction of (a) improvement in conjunction with plastics (b) shift away from paper to plastics and (c) demands of export packaging.

In the category (a), some of the recent trends in India are:

(i) *Cold lamination*: The imported as well as the locally available cold laminating facility using plastic films, notably, polypropylene, PVC and polyester are helping in the improved eye appeal of packages. Paper board of poor quality can be upgraded when printed and thus laminated. The sophistication in demand in some areas for

---

From agricultural waste to paper

RECENT research on the possibility of utilising farm waste for the manufacture of paper and allied products has borne fruit at the Tamil Nadu Agricultural University.

The college of Agricultural Engineering, affiliated to the University, undertook this research activity as far back as 1976. An inter-disciplinary approach which co-ordinated efforts of various departments such as agricultural chemistry, farm machinery, and farm processing resulted in farm waste being screened for pulp manufacture. The pulp extracted has been found useful for the production of various types of cardboards, paper boards, wrapper papers, brown and white paper, etc. The researchers, headed by Prof R. K. Sivanappan, the dean, however, do not claim to produce high quality writing paper. In fact, their objective is to economically utilise farm waste, keeping production costs as low as possible in order to make the end product competitive.

After screening a variety of raw materials, attempts were made to produce paper, cardboards files and particle boards. Different combinations of rag materials and waste paper with agricultural wastes offered scope to produce papers, envelopes, cardboards and office files, which have a good market. Since hosiery cuttings and rags impose constraints on the cost of production, the second phase of raw material study was concentrated on the different combination of waste paper and agricultural wastes.

Their qualities have been compared with the conventional products available in the market with reference to the strength, durability and finishing characteristics.

The study has shown that following raw materials could be used for extracting paper pulp. Jawar chaff (not useful as feed for cattle), cotton stalk (not decomposed easily), maize cobs after removal of the grains, sunflower stalk (difficult to decompose with hard fibrous components), mature bajra stalk (thrown off as waste), banana pseudostem and sheath (with valuable fibre but not used in industry), Okhra bhendi stalk (over matured ones), papaya stem thrown away as waste, Glyricidia pods available in plant after green manure salvage, mature napier grass not used as cattle feed, lantana weeds (noxious thorny plant difficult to eradicate), mesta (defibred) stem, and prosopis juliuora (noxious thorny weed).

Cost factor

One paper pulp plant to utilise the farm waste could be set up at a cost of Rs 2 lakhs, covering the cost of building and machinery. The raw material could be obtained for running the plant all the year round from a farm land of about 500 hectares, depending upon the crops cultivated. If it were banana, cotton and jowar area, enough waste material could be obtained all the year to run the plant. One of the major inputs being water, one must assure adequate water supply all the year round. One unit could employ about 20 persons when worked for eight hours per day. The net return from the investment would, however, depend upon the efficiency of the management.

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cartons points to a potential for growth of this application.

(ii) *Lamination with metallised films*: The availability of metallised plastics and their use in certain areas have promoted the lamination of metallised plastic films to paper board with printing techniques being able to offer proper surface decoration facilities. This area offers promise.

(iii) High gloss coated paper boards have taken over the sophisticated markets notably in the garment trade. There is potential for intensification of effort to widen the sphere.

(iv) The use of polyethylene coated folding board cartons with the change in the sealing systems, compared to conventional systems, have captured food packaging markets abroad. The flame sealing technique can help expand markets for paper packaging.

(v) The promise of indigenous availability of PVDC should motivate suppliers to begin experiments on the use of coated boards. Whether for water-proof applications or high gloss application or food contact applications PVDC coated paper and boards would be found to be useful.

(vi) So far the country has only witnessed the lined carton systems, but indications are that the coated carton systems will appear on the Indian scene to pack dairy products, oils, etc.

(vii) The tetra-pak system is already being discussed. The use of lined or coated cartons for granular and liquid food products can be conveniently promoted provided large scale investment is made in R&D.

(a) The movement away from paper based packaging should also interest suppliers of paper based packaging materials in order to help plan a strategy for growth. The use of plastic bags for laundry, shrink packaging for unitisation etc as a step away from paper board cartons and similar shifts will have to be taken cognizance of.

(b) There is certain shift taking place in the composition of our exports. There is movement towards consumer packages in selected areas. The exporters would have to be helped with improved packages if they have to compete effectively and stay in the markets. They should be enabled to obtain better value for money, in order that they in turn can enhance their export earnings.

Conclusion

It may be stated that as packaging in India is still in its infancy, there is room to expand every sector. Paper packaging is no exception. Creative efforts in the areas of (a) improved functional design, (b) user education on end use needs, (c) making greater use of modern materials to offer new combinations which are cost effective, and (d) promoting the concept of better value are the need of the hour.

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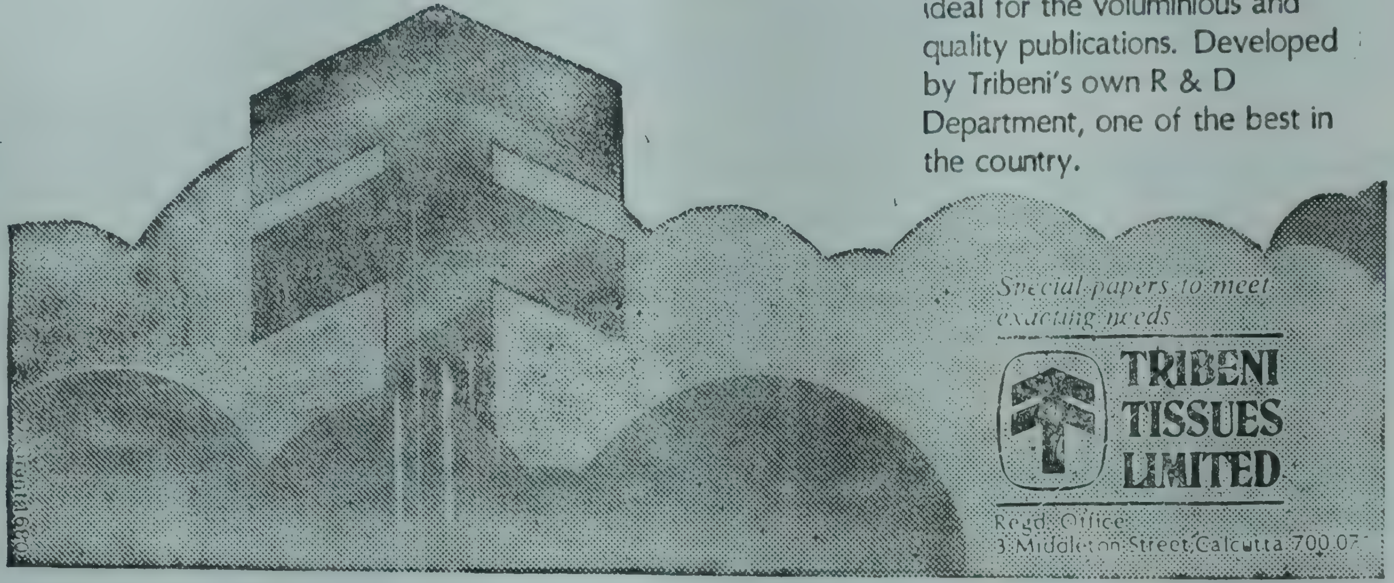

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STATISTICS

By Commerce Research Bureau

Number of units, installed capacity and production of paper and paper board in India

Year	Number of units	Installed capacity		Production		Capacity utilisation
		'000 tonnes	% variation	'000 tonnes	% variation	%
1961	28	410.0	—	364.8	—	89.0
1962	31	433.8	+ 5.8	387.6	+ 6.3	89.3
1963	38	502.2	+15.8	462.6	+19.3	92.1
1964	48	555.9	+10.7	490.6	+ 6.1	88.3
1965	55	643.9	+15.8	537.0	+ 9.5	83.4
1966	55	643.9	—	585.1	+ 9.0	90.9
1967	57	701.2	+ 8.9	608.7	+ 4.0	86.8
1968	57	730.0	+ 4.1	639.4	+ 5.0	87.6
1969	57	730.0	—	701.0	+ 9.6	96.0
1970	56	768.0	+ 5.2	759.6	+ 8.4	98.9
1971	58	900.6	+17.3	778.8	+ 2.5	86.5
1972	59	953.9	+ 5.9	784.8	+ 0.8	82.3
1973	59	967.0	+ 1.4	775.0	— 1.2	80.1
1974	68	1,009.0	+ 4.3	826.8	+ 6.7	81.9
1975	74	1,068.0	+ 5.8	812.4	— 1.7	76.1
1976	75	1,103.0	+ 3.3	874.8	+ 7.7	79.3
1977	75	1,137.0	+ 3.1	919.2	+ 5.1	80.8
1978	86	1,265.0	+11.3	1,006.0	+ 9.4	79.5
1979	106	1,380.0	+9 .1	1,047.0	+ 4.1	75.9
1980	121	1,538.0	+11.4	1,058.8	+ 1.1	68.8

SOURCES: (1) Central Statistical Organisation, Government of India, **Monthly Statistics of the Production of Selected Industries,** various issues.

(2) **Monthly Abstract of Statistics,** various issues, and

(3) Commerce Research Bureau data system

By Commerce Research Bureau

Trends in imports of paper and paper boards in India: 1970-71 to 1978-79

Year	Quantity ('000 tonnes)	Value (Rs crores)
1970-71	158.99	24.81
1971-72	221.14	34.70
1972-73	175.49	30.47
1973-74	134.03	28.64
1974-75	157.18	58.43
1975-76	116.63	55.46
1976-77	139.44	61.14
1977-78	190.24	80.79
1978-79	256.85	102.72

SOURCE: Monthly Statistics of the Foreign Trade of India, Vol. II, Import, various issues.

By Commerce Research Bureau

Paper mills in India: 1980

Name of the State	No. of units
Andhra Pradesh	8
Assam	2
Bihar	3
Gujarat	19
Haryana	10
Karnataka	7
Kerala	3
Madhya Pradesh	5
Maharashtra	24
Orissa	2
Punjab	1
Tamil Nadu	4
Uttar Pradesh	17
West Bengal	14
Union Territory	
Chandigarh and Pondicherry ..	2
Total	121

SOURCE: Reply to Unstarred Question No. 2605 in Rajya Sabha on December 10, 1980

By Commerce Research Bureau

Index numbers of wholesale prices for paper and paper products

(Base: 1970-71=100)

Year	Index	Percentage variation over the previous year
1971-72	110.4	+10.4
1972-73	114.3	+ 3.5
1973-74	129.2	+13.0
1974-75	184.8	+43.0
1975-76	183.8	— 0.6
1976-77	180.1	— 2.0
1977-78	184.5	+ 2.4
1978-79	196.0	+ 6.2
1979-80	237.4	+21.1
1980-81 .. .. (April to September)	258.3	+15.4*

* Percentage variation is over April-Sept. 1979-80

SOURCE: Office of the Economic Adviser, Ministry of Industry, Revised Index Numbers of Wholesale prices in India, Monthly Bulletin for September 1979 and September 1980.

By Commerce Research Bureau

Trends in exports of paper and paper boards in India: 1970-71 to 1978-79

Year	Quantity ('000 tonnes)	Value (Rs crores)
1970-71	23.83	3.94
1971-72	8.49	1.43
1972-73	10.84	2.14
1973-74	20.32	4.31
1974-75	12.18	3.88
1975-76	4.47	1.62
1976-77	3.45	1.51
1977-78	5.80	3.79
1978-79	5.16	3.58

SOURCE: Monthly Statistics of the Foreign Trade of India, Vol. I, Export, various issues.

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Special Reports

New vaccines against poultry diseases

By OUR SPECIAL CORRESPONDENT

PUNE

THANKS to the efforts made by the Bharatiya Agro-Industries Foundation (BAIF), large-scale deaths of poultry birds due to Marek's disease is likely to become a phenomenon of the past. For, the BAIF Research Institute of Animal Health (BRIAH) has recently developed new vaccines which would be used to protect poultry birds from several deadly diseases.

The poultry vaccines are at present imported into the country. The BRIAH took up the challenge of producing the vaccines indigenously with an accent on developing also the technology indigenously while at the same time maintaining high quality. The technology of poultry vaccines is a secret closely guarded by companies of the developed countries. It is very heartening to know that the BRIAH has succeeded in producing these voccines through indigenously developed technology.

The BAIF scientists working at BRIAH laboratories, Wagholi, ten kilometres from Pune, have also produced new generation animal vaccines against some of the important bacterial and viral diseases. The manufacturing technique of these vaccines is a major departure from the crude methodology hitherto practised at various centres of the country. The BAIF technology makes use of a specially developed media permitting large-scale batch cultures in three dimensional phase and the sophisticated biochemical concentration, deep freezing and freeze drying procedures, which not only improves the quality of the vaccines but also has an added advantage of reducing considerably the dosage regimen, thus resulting in savings on account of packing, transport and administration. The new generation animal vaccines developed by the BAIF are directed against diseases like rinderpest, haemorrhagic septicaemia, and black-quarter of cattle and new castle (Ranikhet) disease of poultry birds. Besides, the BAIF has also recently developed Aluminium Hydroxide Gel (AHG) which too is presently being imported.

The BAIF is also making research and development efforts to develop vaccines for other diseases relating to the cattle, buffaloes, sheep and poultry. As a result of these efforts, it succeeded in developing vaccines for foot and mouth disease of the cattle. The new techniques developed by BAIF of concentration of antigens are expected to permit blending of multiple vaccines which eventually would lead to an era of "single dose innoculation for multi-disease protection".

Dr D. S. Gorhe, Chief Executive, BAIF, said that the BAIF had come into existence in 1967 with a view to providing gainful self-employment to the rural poor through conversion of low-productive rural liabilities into productive assets. This is being done through the rural development programme of the BAIF for which purpose it has set up four main divisions: integrated rural development; central research station for cattle and agriculture; water resources development and management; and animal health.

India has the largest cattle population in the world (186 million) and one of the lowest milk yields (about 350 litres per lactation). BAIF is using this mass of nondescript cows as seed-bed for producing a new generation of cross-bred cattle. A cross-bred cow born out of BAIF's programme yields over 2,500 litres of milk per lactation. A cross-bred bull born out of BAIF's programme

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on July 31, 1981 over		
		July 31, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.50	3.50	3.50	2.80	—	—	25.0
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.20	2.20	2.20	2.00	—	—	10.0
Bajra	Average	2.20	2.20	2.20	2.00	—	—	10.0
Gram dal	Average	6.30	6.20	6.20	5.95	1.6	1.6	5.9
Tur dal	Average	6.60	6.50	6.50	5.50	1.5	1.5	20.0
Potatoes	Average	2.40	2.00	2.40	2.60	20.0	—	—7.7
Onions	Average	1.60	1.50	1.60	1.00	6.7	—	60.0
Milk per litre	Buffalo	6.00	5.00	5.60	4.25	20.0	7.1	41.2
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.51	1.39	—	9.9	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.25	—	—	24.0
Sugar	Average	6.80	6.50	7.00	7.90	4.6	—2.9	—13.9
Gur	Average	6.50	6.00	6.00	6.00	8.3	8.3	8.3
Groundnut oil	Average	15.50	15.00	15.00	11.00	3.3	3.3	40.9
Vanaspati	Average	16.00	16.00	16.00	—	—	—	—
Toilet soap	—	1.95	1.95	1.90	1.90	—	2.6	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

is proving a good draft animal in terms of tonnage that it can carry and haul.

As at the end of 1980, BAIF was carrying on this cattle breeding programme through 370 cattle breeding centres in the states of Maharashtra, Rajasthan, Gujarat, Karnataka and Uttar Pradesh. These centres are manned by trained veterinary graduates, who reach out to about 3,50,000 rural families in about 7,000 villages. The BAIF is entrusted the task of achieving one million cows conception through 500 cattle breeding centres. So far BAIF has registered nearly 1,30,000 conceptions and over 50,000 cross-bred female cows have been reported born. BAIF uses artificial insemination technology, using frozen semen of high quality selected bulls, which are also undergoing progeny testing. A very important feature of the BAIF cattle breeding activity is that the farmer's cow is inseminated at the farmer's door.

BAIF has established its central research station at Uruli Kanchan in Maharashtra where all necessary infrastructure is available to produce, process and supply the necessary critical inputs. Some of the important facilities erected at the central research station are cattle breeding farm, frozen semen bank, research laboratories, fodder and forrage development, and a training institute.

The activities of the BAIF are carried out by a staff of over 600, comprising specialists in different areas of animal health, agriculture, general science, engineering, management and finance. This multidisciplinary nature of the staff helps the BAIF to adopt a professional approach in its activities. The BAIF has so far invested about Rs 6 crores in its projects, financed by the Union Government, various state governments, Government of Denmark and France as also several Indian research agencies and industrial houses.

New package for rural industries

By A SPECIAL CORRESPONDENT

IT was with great fanfare that a new Industrial Policy Resolution was sought to be publicised in July last year. What has been its impact on taking industry to promising rural areas? Hardly say any, if we were to make any sense of Dr Chanana's announcement that Government will now start a new programme in 101 districts, selected for special concessions on account of their backwardness. The new deal seeks to attract industrial investment to these areas with a subsidy at the rate of 15 per cent of the fixed capital costs on land factory buildings and plant and machinery. The investment subsidy will be given as an outright grant. This step will be particularly welcome in the northern and north-eastern areas and in the far-off island territories.

But recourse to such piecemeal steps suggest that Dr Chanana has yet to arrive at Government's considered formulation of industrial policy for rural development. Last year's measures have obviously done little to correct regional imbalances, to disperse industry to generate new rural incomes and therefore were less to relieve rural deprivation and to reduce exodus from villages to urban centres. If there had been some success with Dr Chanana's policy, Mr A. R. Antulay, Maharashtra's Chief Minister, would not think of work permits for migrants to Bombay. With few new jobs being created in old Bombay, the work permit—like the cement permit—will become another means of extending patronage, undermining political opposition and enabling political friends to make some more illegal and unaccountable money.

Dr Chanana's new measure is said to be an outright grant of Rs 15 lakhs at the maximum for an industrial unit. Whether or not it proves to be sufficiently attractive remains to be seen. Its impact will be hard to assess. It will also have to be seen against the background of existing incentives. An important and connected measure has seen a subsidy of 50 per cent of the transport costs when raw materials and finished goods are moved to and from certain rail heads and parts. In 246 selected backward areas and districts, new entrepreneurs already enjoy other fiscal aids and subsidies. As between neighbouring states, moreover, there has sometimes been a beggar-my-neighbour spate of additional benefits. The sum total of such tax concessions, time-bound exemptions and financial and fiscal incentives needs to be assessed for both their effectiveness in furthering declared policy and for the burdens on the honest taxpayers. The working of state industrial corporations—most of them now short of funds—is a proof enough that more is needed than a package of the most attractive incentives.

A useful step has been the shelf of project reports on industries best suited to the varied resource endownments of different regions. What is still lacking is a concert of efforts to take industry to rural areas. Much more remains to be done to link the upgrading of the skills of local labour with the development of rural infrastructure. New ways of generating rural incomes have to go hand in hand with functional literacy and social education, so that the demand for goods and services of illegal distillers and bottleggers is not the only one to go up.

To create rural employment of the right kind will for many years continue to present varied and serious difficulties because rural poverty in its economic, social and human dimensions is wider than can be identified by a list of basic minimum needs. Incentives for rural industrialisation apart, Government must look at the policies in the round. Does a spate of piecemeal concessions create uncertainty and make the entrepreneurs hold their hands while waiting for more benefits? Do they increase the area of bureaucratic discretion and add to delays? Are there other developments, like a breakdown of law and order which make even the existing and hitherto successful industrial growth centres a dangerous place to live in? Whether it is a post office, telephones or medical relief, common facilities are slow in coming. There also is great need to encourage private enterprise in welfare programmes it is well disposed to finance. There is no reason why it should not help establish good educational and sports institutions. There is urgent need to extend tax concessions to charitable and other organisations venturing into backward areas with industrial potential in order to set up playgrounds and gymnasia, creches and day-care centres dispensaries and hospitals. While Government still learns from its experience with varying packages of incentives for dispersed and rural industries, it must show imagination in enlisting the support of private charity and voluntary leadership in public welfare.

SPONGE IRON

Is DR process the answer?

BOMBAY

INDIA appears to be catching the eye of foreign suppliers of the technology of producing sponge iron in a big way. The foreign interest stems from the fact that already a sponge iron plant with a capacity of 30,000 tonnes a year, built with West German know-how has been functioning successfully for some time past at Kothagudem in Andhra Pradesh and its trial production has been found to be quite satisfactory by a few mini steel plants which were supplied with this raw material as an additional input for their arc furnaces. Sponge iron is gradually coming into its own as the prices of ferrous melting scraps, the principal raw material for mini steel plants, continue to soar and even the available supplies are not reported to be of graded quality. This is why selected imports of scraps as well as sponge iron, the latter especially from Indonesia, have been permitted. At the same time a number of sponge iron projects are on the cards in Orissa and elsewhere.

The Government of India has reportedly decided upon a major shift in its steel policy and encourage setting up of sponge iron plants, if necessary with foreign technical collaboration. It has also liberalised rules regarding establishment of mini steel plants. All this points to growing demand for sponge iron in future by mini steel plants and thus there are seen good prospects for setting up a chain of sponge iron plants in the country. An Italian firm, Danielli, is already reported to have approached the Government to set up a 20,000 tonne capacity sponge iron plant.

The overseas holders of the technology for producing sponge iron appear to have got wind of the Government's thinking well in advance. At least Davy McKee (Minerals and Metals) Ltd of the UK, which has an exclusive arrangement with Direct Reduction Corporation of the US to engineer and contract direct reduction plants based on DRC technology, chose its time well in organising a series of seminars between July 20 and 29 aimed at selling this technology to interested Indian parties.

The DRC technology is based mainly on coal as principal reductant for converting iron ore into metallic iron or sponge iron at elevated temperatures in a rotary kiln. Iron ore in

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As I see it

The new inequality of states

THE uneven development of the various regions of the country is a well-known fact which requires no elaboration. However, the character of this unevenness has been undergoing a change and this fact is far from well-known or understood. The unevenness in development during the British period was due almost entirely to accidental factors. The regions where the British had settled—Calcutta, Bombay and Madras—became developed. The element of policy in this development was minimal. Development was not sought as an objective of deliberate policy. It was more the result of meeting the current needs of the rulers than the effort to improve the conditions of life of the people.

Development now is a function of deliberate policy of the Central Government in New Delhi, which wields also the authority in this respect. Industrialisation is an important means of development. But economic policy, which decides industrialisation, is now heavily dependent on the will of the powers that be in New Delhi. Even such a decision whether the Government of Maharashtra can continue with the monopoly cotton procurement scheme, which has been in operation for nearly a decade, or whether the Government of Gujarat can introduce such a scheme of monopoly cotton procurement is no longer left to the state governments to be taken but are subject to the veto of the bureaucracy in New Delhi.

Mr Jyoti Basu, the Chief Minister of West Bengal, recently gave vent to the frustration of the state governments by asking the Prime Minister, Mrs Indira Gandhi if it was the objective of the Central Government to deny all avenues of development to West Bengal and convert the State into an industrial desert. The background to this complaint was provided by the objection of a so-called experts' committee appointed by the Central Government against setting up an electronics industry centre in West Bengal—on the ground, of all reasons, that West Bengal being a border State cannot be allowed to set up any important industrial centre. The Government of West Bengal's proposal for setting up a unit of Bharat Electronics Ltd in West Bengal had thus been put into cold storage. Mr Basu pointed out that not a single modern industrial complex had been allowed to come up in West Bengal, which was still in the straitjacket of the industrial framework set up by the British. The Government's proposal for the electronics complex was intended to facilitate the economic regeneration of the State, which had fallen so low that the per capita annual consumption of electricity (113 kwh in 1979-80) in West Bengal, which was at one time the premier industrial state, had fallen below the all-India average (134 kwh in 1979-80).

The absurdity of the "border state" argument is self-evident. Many states of the Indian Union are border states and not in the eastern region alone. Punjab, Gujarat, Jammu and Kashmir and Rajasthan have contiguous boundary with Pakistan and Maharashtra, Haryana, Madhya Pradesh and even Delhi are not far away. Uttar Pradesh and Bihar have got boundaries extending up to Nepal; Bihar has got a boundary with Bangladesh as well. Jammu and Kashmir, Himachal Pradesh and Uttar Pradesh have got boundaries with China. Tamil Nadu is very near to Sri Lanka and so on. The argument is raised not because of any intrinsic soundness but just to spite the State Government's efforts.

This is the new element in the inequality of the states. It is this policy that has created disaffection among a large number of people in Assam, Manipur, Nagaland, Tripura, Mizoram and elsewhere.

Subhash Chandra Sarker

BUSINESS OPINION

MR S. Moolgaokar, chairman, The Tata Engineering and Locomotive Company Ltd: "After-sales service obviously cannot compensate for the inadequacy of the roads in our country. I am afraid we may soon have to face the grim situation of a vast sub-continent which has choked its economic arteries. Stagnation in road building is not surprising, considering the meagre outlays that are being earmarked for it.

"The Sixth Five-Year Plan (1980-85) provides only Rs 660 crores for national highways — a mere 0.7 per cent of the total Central and State outlay. Compared with 1.3 per cent originally proposed in the Fifth Plan and a little over two per cent in the Fourth Plan, the trend is obvious. What is worse, several projects from the previous plan periods have yet to be completed and 38 per cent of the meagre Sixth Plan provision is earmarked for them.

"Building a total road system for the country, with roads suitably designed and maintained for the traffic they have to bear, would lead to substantial savings in fuel consumption, quite apart from the employment which is bound to be generated.

"International experts wonder at the persistence with which India disregards the world-wide trend towards upgrading highways to carry heavier (and hence more fuel-efficient) vehicles. The need for inland transport is increasing so fast that, however, efficient the railways become, our country will face a shortage of transport capacity. Step-motherly treatment cannot curb the growth of road transport but it can have a major impact on its efficiency. Considering oil prices today, no country can say it is too poor to afford good roads. The vastness of India only makes the argument more telling in our context.

"Having mentioned fuel savings, I must reiterate another issue which I have raised year after year as being a prime means of achieving this saving. I am referring, of course, to the abolition of octroi. After years of discussion, it has been recommended at the national level to abolish octroi but the recommendation has yet to be implemented in all the states. Every month by which we delay the implementation means crores of rupees worth of diesel (mainly paid for in precious foreign exchange) being burnt up, while vehicles wait endlessly at the pernicious octroi posts which dot our country."

COMMENTING on the recent decision of the Government to sharply raise prices of basic inputs like petrol, diesel, kerosene, fertilisers, etc, Mr C. I. Gandhi, senior vice-president, Bharat Chamber of Commerce, Calcutta, says : "The steep hike in prices of petrol, diesel, kerosene, cooking gas and fertilisers has come at a time when the Government has been seriously busy in tackling the problem of escalation in costs and prices and mitigating consequential hardships to the public. Needless to mention that the steep rise in the prices of petroleum and petroleum products as well as fertilisers will have their obvious cascading effects on costs and prices adversely affecting quite a wide range of essential commodities and provide further fillip to upswing in prices to complicate the current economic situation.

"Already these items have suffered successive price rises making them pretty costly. In the face of continuing bottleneck in rail transportation the hike in mineral oil prices will not only inflate the cost of road transport but would also enhance the fuel cost in several important industries. The upward revisions in prices of fertilisers in quick succession would not only inflate the cost of cultivation as well as retard wider application of scientific inputs but would also reinforce the demand for further upward revision in prices of agricultural products to the serious detriment of agro-based industries. In view of the far-reaching deleterious consequences indicated above, the reported rise in cost of oil exploration and development should have been taken care of otherwise to avert the cumulative effects of further upward revision in prices of these highly sensitive items."

natural lump or oxide pellet form and sized to between –25 mm and +5 mm, is fed to the kiln along with appropriate quantities of coal and limestone or dolomite. DRC, which operates a permanent pilot plant of 50,000 tonnes annual capacity at Rockwood in Tennessee (USA), says a single kiln direct reduction plant can be designed for as little as 50,000 tonnes per year output, but designs and layouts could be made available for capacities in excess of 500,000 tonnes a year too.

Dr J. A. Kennelley, president of Direct Reduction Corporation, has visualised bright prospects for his company's technology in India especially as this country has limitations in respect of availability of ferrous scraps, natural gas for sponge iron production, and high quality coking coal for blast furnace route of steelmaking. On the other hand direct reduction process allows use of non-coking coals of which India has abundant reserves.

Dr Kennelley was optimistic of India taking a big leap in sponge iron manufacture and that is why his company was keen on expanding its markets in this country. According to him, it was immaterial whether the sponge iron plants in India came up in public sector or private sector, because DRC would allow prospective Indian entrepreneurs to use the process as licensee of DRC. It will work closely with the entrepreneur to ensure that the plant is designed, engineered and constructed properly. DRC will also work with a construction engineering company of the entrepreneur's choice and provide process and engineering flow sheets as also certain key items of the plant itself.

Bombay spot exchange rates of currencies as on 3-8-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.70	9.90
Austria	A. Schilling	190.00	196.00
Belgium	B. Franc	445	454
Canada	C. $	13.49	13.95
Denmark	D. Kroner	85.70	87.00
France	Franc	64.90	66.00
Hong Kong	H.K. $	63.90	65.80
Italy	Lira	13,540	13,720
Japan	Yen	2630	2680
Malaysia	M. $	26.10	26.90
Netherlands	Guilder	30.20	30.70
Norway	N. Kroner	67.80	68.90
Singapore	S. $	23.80	24.60
Sweden	S. Kronor	57.70	58.80
Switzerland	S. Franc	23.50	24.00
UK	£	6.0325	6.0840
USA	$	10.96	11.16
West Germany	D.M.	27.90	27.70

Tea auctions in Singapore

CALCUTTA

FOR historical as well as economic reasons London has been the prime, rather the only international centre for tea auctions and no attempt to set up a second world tea auction centre in any way comparable to London had so far been made. But of late there have been reports that a London broking firm Gow White has plans to establish an auction centre in Singapore in association with Calcutta-based tea broking firm of J. Thomas and Co, the leading tea auctioneers in India. While a report in the *Asian Wall Street Journal* of July 21 says that these two have decided to start auctioning from October next, the Calcutta firm would not confirm the opening time and would only say that plans are still tentative.

There woud be many hurdles before the auction could start. First of all London's resources as an auction centre are by no means fully stretched and all the major and minor producing countries excepting Indonesia and China are sending direct consignments to that centre for the sale of their teas. India in particular has steadily raised the quantity of its consignments from 38.19 million kg in 1975 to over 60 million kg during the past year. It is by no means certain that Indian producers would be keen to send their teas to Singapore especially when their own expanding internal market is cutting into the export surplus.

The promoters must be banking on Indonesia and China as their supply sources, especially China which has been producing tea in increasing quantities and has exported during the past year nearly 100 million kg Indonesia, too, has increased its tea output from some 48 million kg to over 80 million kg over the next 20 years, nearly 65 per cent of which she has to sell abroad a fair proportion of exports through private sales.

Singapore has emerged as a re-export centre not only to the neighbouring Asian countries including Pakistan but also to New Zealand, Japan, the United States, Australia and even West Asia. This explains the growing operations of the world's tea multinational trading companies such as Brooke Bond and Lipton in Singapore. These companies moved into the island country only in the mid-50s but the growth in the volume of their business has been phenomenal, partly because of the easy shipping facilities and Singapore's geographical location in the middle of so many major tea producing nations. It would

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71 = 100)

	During the week ended				Percentage variation			
	July 11 1981	July 4 1981	July 13 1981	July 12 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products	274.0	273.7	274.3	260.4	0.1	—0.1	5.2	32.7
Primary articles	268.7	261.8	257.2	234 0	2 6	4.5	14.8	30.6
Fuel, power, lubricants etc.	425.0	400.5	400.3	353.1	6.1	6.2	20.4	66.7
All commodities	284.6	279.5	277.8	257.2	1.8	2.4	10.7	35.3

Money and Banking (Rs crores)

	During the week ended				Percentage variation			
	July 17 1981	July 10 1981	June 19 1981	July 18 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b)	58,323	58,378	57,642	49,125	—0.1	1.2	18.7	37.4
Bank credit	26,733	26,598	26,271	22,284	0 5	1.8	20.0	37.4
Aggregate deposits	40,543	40,402	39,512	33,388	0.3	2.6	21.4	42.6
Foreign exchange reserves(a)	4,877	4,877	4,911	5,212	—	—0.7	—6.4	—15.0

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	May. 1981	144.6 (a)	146.5 (a)	—1.4	10 5
Exports	Rs. crores	April 1981	592	502	17.9	—2 6
Imports	Rs crores	April 1981	968	895	8.2	3.0
Trade balance	Rs crores	April 1981	—376	—393	—	—
Foreign exchange reserves (a)	Rs crores	June 1981	4,879	5,047	—3.3	—6.8
Wholesale price Index	1970-71=100	June 1981	278.3	276.1	0.8	14.7
Consumer price Index for Industrial workers	1960=100	May 1981	433	427	1.4	13.6
Unemployment(d)		May 1980	149	148	0.7	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income	1970-71=100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,670	6,459	2,523	3.3	14.9
Imports	Rs crores	12,106	8,908	2,955	35.9	22.3
Trade balance	Rs crores	—5,436	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)*	Rs crores	55,229	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.6	217.1	139.7	18.2	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	..	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

help their operations further if an auction centre is also located in that country. But it will all depend on, firstly, whether and how many of the producing nations are willing to ship their teas to Singapore, possibly at some extra cost for speedy shipments, and how soon infrastructural facilities for storing tea for auctions can be got ready. The main calculation behind the plan appears to be based on the two facts : First, foreign tea buyers are finding it increasingly difficult to get their tea from producing countries, especially India, because of port and shipping difficulties and, secondly, Indian teas are facing increasing competition in London from the African producers. It would be nearer and more convenient to participate in Singapore auctions.

Be that as it may the Indian partners of Gow White are not very forthcoming on the date, the frequency and the expected volume of offerings at the proposed auction centre since the plans are still "tentative". The report in the *Asian Wall Street Journal* has it that the auctions will start from October next and there will be fortnightly auctions to begin with. Gow White and J. Thomas would not form a single company but would keep their identities by maintaining their own respective establishments. The cost of holding the auctions would be shared between the two. Whether in fact such definite arrangements have been reached between these two broker firms will be clear in a few weeks' time for a time bound plan of this nature cannot be kept concealed for long.

Jute promotion campaign

NEW YORK

OUTBID during the last decade by man-made synthetic in the burgeoning carpet backing industry, the natural fibre jute, the traditional, resilient raw material for carpet manufacturers, is bouncing back to regain its pre-eminence in the Western market.

"Jute is more of a quality product", says a major European carpet manufacturer using jute. "It gives us confidence, because there are no technical problems working with jute."

In order to boost the consumers' confidence in the inherent qualities of jute, the United Nations Development Programme (UNDP) has launched a special $ 500,000 project designed to educate the end-users in North America.

The two-year project is to be implemented by the United Nations Conference on Trade and Development (UNCTAD) through its focal point for trade promotion activities, the International Trade Centre (ITC).

The jute promotion campaign in North America, is to be carried out by ITC in conjunction with the Jute Carpet Backing Council (JCBC), a New York-based trade association comprising North American importers of jute carpet backing.

Jute is of crucial importance to the economies of Bangladesh and India and of significant importance to Nepal and Thailand. In India, for example, more than six million families derive their livelihood from jute cultivation, marketing, industry or ancillary activities. In Bangladesh, where some 45 per cent of the country's labour force is engaged in jute production, jute and jute goods exports account for nearly 55 per cent of the country's export earnings.

The jute promotion campaign is part of a comprehensive ITC jute market development programme that includes similar efforts covering hessian goods and jute carpet backing in Western Europe and jute woolpacks in Australia.

The drive to re-enlist carpet manufacturers as end-users of jute began in Western Europe in January with a $ 1.3 million campaign, funded by the Netherlands, Belgium, Switzerland and the European Economic Community (EEC).

The United States represents the largest single export market for jute, with carpet backing imports from India and Bangladesh alone amounting to $ 100 million in 1979. However, the share of jute in the market for tufted carpet backing has declined in recent years.

In the past few months, there have been indications of an upturn in jute consumption in the United States, primarily because jute prices have become increasingly competitive with synthetics. The ITC campaign aims to accelerate this process by emphasising the price advantage and quality benefits of jute carpet backing. "We believe that demand stimulation of a product is as important as supply management," says O. P. Mathur, Co-ordinator, Office for Special Commodities Projects of ITC.

After two decades of continuous expansion, world jute consumption began to level off in the early 1970s, causing supply and trade disruptions. The Bangladesh Liberation War in 1971 and the subsequent Indo-Pakistan border conflict resulted in soaring prices of raw jute and jute goods and severe market losses for the commodity in all major use areas. Jute consumption declined by about 35 per cent in the early 70s, but managed to retain about 40 per cent of the market during 1975-78.

Through much of the 1970s, jute secondary backing retailed for about 50 cents per linear yard, compared with 70 cents for foams and 55-57 cents for synthetics. Since 1976. prices have risen, and jute currently sells on a par with synthetics for 70 cents per linear yard. But the ever-escalating prices of crude oil, resulting in the continuous rise in prices of synthetics, will make jute increasingly more attractive to carpet manufacturers.

Improvements in the competitive position of jute products, resulting from rising crude oil prices are, going to be felt over the long-term. A recent Food and Agriculture Organisation (FAO) report is optimistic about the jute industry outlook not only because of the rising costs of synthetic raw materials, but also as a result of general upward pressures on overall costs of synthetics production, including utilities charges, operating costs and overhead expenses.

Propylene, a major synthetic and the base chemical for polypropylene polymer, is one of a number of by-products obtained from crude oil. It is a major competitor of jute in carpet backing. Jute also came under severe competitive pressure from substitutes such as polypropylene and polyethylene that were particularly popular in Western Europe.

Jute producing countries emphasise jute's qualitative edge over the synthetics, such as its thickness, which is viewed as a distinct advantage in primary carpet backing by the consumer. For the consumer, thickness of jute, the ITC official points out, means greater resilience and getting more carpet for the dollar. Jute's strength prevents pile fibres from rupturing or breaking at their bases under huge furniture and big cabinets. The mobility of furniture with wheels on a well glued down jute-backed carpet is the best contract carpet.

In the market for secondary backing, where the supporting material is designed to increase the carpet's dimensional stability and improve its handling, jute's mesh weave and fibrous composition make it simpler for the carpet manufactured to glue down large areas of carpet, especially in the contract market.

World recession hits Indian leather exports

MADRAS

WORLDWIDE recession due to hike in oil prices and rise in interest charges have resulted in considerable reduction in the offtake of leather by manufacturers of leather goods in the developed countries, which are the main consumers of Indian leather. Use of leather goods and footwear has fallen appreciably in the European markets.

The overall leather exports from India during 1980-81 were Rs 330 crores which was 22 per cent less than Rs 425 crores in the previous year. Despite this fall in leather exports export of leather products registered a rise of 24 per cent from Rs 69.49 crores to Rs 85.90 crores. Leather exports during April-June 1981 amounted to Rs 23.60 crores as against Rs 16.98 crores during the corresponding period of the previous year, an increase of 39 per cent.

There were signs of revival during April 1981 but it was a temporary phase. The Indian leather industry now looks to the Paris fair scheduled for September 1981 with hopes of a revival during the latter part of the year. Informed opinion in India and abroad feels that the recession should not have continued for so long.

Leather industry circles here feel that there should be a definite short-term and long-term policy for leather manufacture and export, and experience had shown that frequent changes in policy had shattered the confidence of buyers and sellers. The long-term policy should be at least for five years and should include a product-mix by which the trade should be permitted to export semi-finished leather and finished leather and leather products in a certain ratio to avoid conflicts with importing countries.

Following the Government of India's policy of discouraging export of semi-finished leather and encouraging export of finished leather, about 75 per cent of leather units have switched over from semi-finished to finished leather and this sophistication in the leather industry had helped India to penetrate the erstwhile difficult markets of Europe and America. However, Indian leather exporters are now confronted with the problem of the importing countries' hostility towards the Government of India's policy of overprotection to semi-finished leather which they had been importing for over 150 years. They feel that they are now being denied access to this precious commodity. The developed countries want India to earmark at least 25 per cent of raw material (semi-finished leather) to them so that they could open up their own market for our finished leather and leather goods to the extent of 25 per cent. Such a demand, leather trade circles point out, is in keeping with the recommendation of the Seetharamiah Committee report made as early as 1973. The trade has urged the Government of India that this recommendation be immediately implemented.

The Leather Export Promotion Council is surprised that despite its recommendation to freeze the export quota at 1980-81 level, the Centre has again resorted to an annual quota cut of 10 per cent. Exporters say it was immaterial whether the quota was utilised or not since that depended on the market situation. In retaliation, the developed countries, especially the EEC countries, have started adopting countervailing measures and are raising tariff walls against Indian finished leather and leather products. It is the Government of India's policy that had invited this trouble, they say.

It is argued that the Government should reduce import duties on certain exclusive leather chemicals and accessories (which are now being taxed from 40 per cent to 250 per cent) and also reintroduce OGL for the import of machinery to accelerate leather exports.

The chairman of the Leather Export Promotion Council, Mr M. Mohammad Hashim, has represented to the Centre that the 150 per cent rise in mandatory rates as against IATA rate increase of 30 or 35 per cent on account of fuel price hike has practically eliminated the concession granted for export promotion. Charters operated by Indian carriers are not helpful to export promotion. Air India's chartered rates to European destinations were high compared to the rates from Hongkong and Singapore. As the recent hike of 5 per cent was "not reasonable", the council has requested the Government to enhance the air freight subsidy from 40 per cent to 60 per cent of freight paid. It has been calculated that air freight works out to more than 10 per cent of FOB value in the case of skins and 20 per cent in the case of bovine hides and calf skins.

It is learnt that in spite of the strong note of dissent of the chairman of the Leather Export Promotion Council who is also a member of the managing committee of the Export Inspection Agency, the Government is going ahead with the programme of bringing finished leather under the control of the Export Inspection Agency. The council has already submitted a memorandum explaining how the scheme is unsuitable to the leather industry which would be hit hard if the scheme is enforced. But the Government has already referred the matter to the Technical committee for report within two months. Since the leather trade considers this as a "life and death" issue, it has determined to fight it "tooth and nail" and the industry has no way except to launch a nationwide agitation against this "unhealthy" policy and also stop exports for a week or fortnight to draw the attention of government and the public.

Mr V. Ramamurti

MR V. Ramamurti, former Joint Editor of *Commerce*, died in Bombay on August 4 after a brief illness. He was 62. He is survived by his wife, four daughters and three sons.

Mr Ramamurti, who was a Master in Arts of the Madras University, quite early in his career was the convenor and secretary of the Tamil Nadu Agrarian Reforms Committee constituted by the late K. Kamaraj, when he was the Chief Minister of Tamil Nadu. That work gave Mr Ramamurti an insight into agrarian problems on which he wrote competently. Later he joined as assistant editor of *Eastern Economist* before switching over to *Commerce* in 1960. He was later to become the Joint Editor of *Commerce*, and subsequently moved over to Madras as chief of bureau of *Commerce*.

Mr Ramamurti was painstaking in his work and scrupulously followed all the good rules of journalism. He was a journalist of conscience. The quality of verifying a figure or statement was to stand him in good stead when he launched a fortnightly *Fact Find* which served as an index to economic and financial developments in the country.

Opportunities for joint ventures in Africa

Concluded from page 259

Paper Mill and Kikomi in Kenya gets circulated at a jet speed, the failures too spread like a wild fire. The latter's negative influence on the goodwill and image created through other overtures also needs attention. Particularly, in case of many African countries Indian leadership has a close rapport with their African counterparts and it is therefore essential that Indian industrialists' performance strengthens the political and cultural bonds, the former being the visible signs of co-operation for development.

Exporters' reputation

All this needs to be matched by the improvement in the reputation of Indian exporters. While India is one of the world's top fifteen producers of manufactured goods with its industrial and technological advance a well-accepted fact, the export performance is still hazy on account of lack of quality control and tenacity in the cultivation of foreign markets. Indian industrialists who are used to enjoying a sellers market treat foreign markets as an outcome of the spill-over effect. Allowing for a few exceptions they have therefore been slow to understand the importance of some non-economic factors such as adherence to standard quality requirements and delivery schedules, quick correspondence, after sales service etc. Most of the African countries have been subjected to a high degree of foreign penetration and the above mentioned aspects are valued most in effecting business deals in Africa. While the trends in ECDC and TCDC are growing favourable to India, and Africa, improvement in trade performance both ways is called for. At present Africa supplies India with only two per cent of its imports and there is clear scope for improvement. On the other hand only five per cent of India's exports find markets in Africa. Some of the joint ventures therefore should be expected to result in the growth of mutual trade.

Floating exhibition

A floating exhibition of engineering goods to popularise further engineering goods in Africa is now a must. Some of the regional branches of Engineering Export Promotion Council such as in Nairobi, are already doing valuable work for promotion of engineering goods exports. Though the entrenched position of multinationals in African countries is a strong deterrent to the introduction of Indian machinery and know-how, African countries have learnt through experience a definite advantage in utilising capabilities developed in India and this has added real impetus to the Indo-African ECDC and TCDC. Increasing credits provided by IDBI to African countries and India's increasing aid directly as well as through the United Nations multilateral agencies such as UNDP and UNIDO etc have now added new dimensions to Indo-African co-operation.

India has also collaborated with Economic Commission for Africa by providing a grant of Rs 5 million to the UN trust fund for African economic development to be utilised for six projects in which Indian expertise is suited to the African development. All these efforts will have to be backed by suitable changes in the investment and financial policies with a view to making them conducive for trade and enterprise abroad. Similarly, the stream of technology transfer which has sprung up from the educational and industrial achievements of Indian people will have to be taken up as an urgent task. Greater moves towards interdependence will not come by chance but will have to be developed through careful assessment of mutual needs and responsibilities.

Africa is a huge continent and any co-operation programme will have to take into consideration the diverse needs of small and big countries alike as well as the needs of newly independent countries like Zimbabwe. Assisting African countries in their economic liberation is a laudable goal and a challenging task and India with its enviable record of co-operation could be expected to perform its best.

No arms export for full employment

From PETER RINDL

VIENNA

THE Austrian example of grass roots organisations influencing and bringing pressure to bear on government policy has been lauded by French socialist youth groups. They have every reason: The Austrian Socialist Youth Organisation was responsible for mobilising public opinion against the construction of atomic power plants in the country and demanding a nationwide plebiscite on the subject. As a result of the plebiscite, which was a decisive "no" to the construction of nuclear power plants, the government had to call a halt to its construction programme in which it had already invested crores of Austrian schillings.

Another issue, in which Austrian socialist youth groups, backed by powerful labour deferations, have forced a change in government policy, is the export of Austrian tanks to Pinochet's Chile. The government halted the export of tanks to Chile, but, it diverted supplies to Argentina.

This diversion of military supplies from one dictatorship to another has caused a furore among the youth organisations. They categorically reject the government's contention that arms exports to these countries are essential for maintaining full employment in Austria. *Young Generation*, a youth magazine from Vienna, states that the export of death is no way to fight redundancy; if it is, war will result.

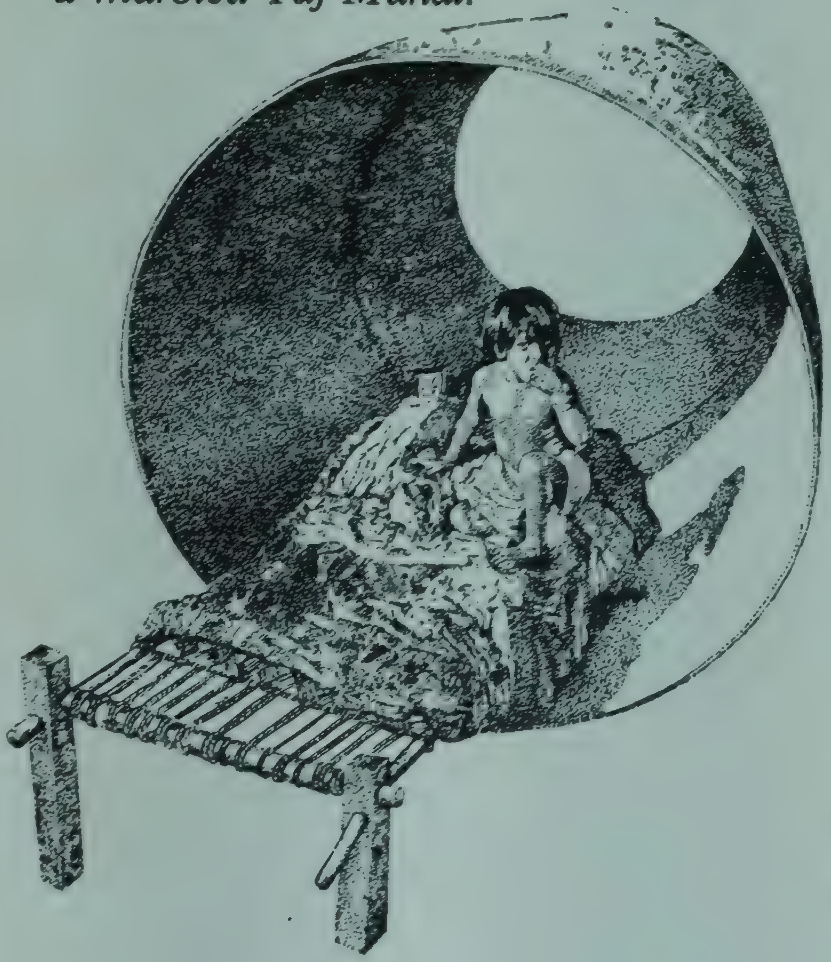
Mr Fritz Prechtl, chairman of Austria's Railwaymens Union and president of the International Transport Workers Federation has fully backed the youth organisations. He maintains that full employment must be achieved and maintained the right way. Mr Prechtl says, "those tanks will never reach their destination". Sailors on board the Greek ships ready to transports tanks to Argentine owe allegiance to the International Transport Workers Federation and are preparing for action against the transport of these tanks.

The Austrian Government would like to defuse this youth struggle by deideolising youth. But youth response to this government attempt has been negative. Youth organisations in the country believe that if they discontinue their ideological opposition to the export of arms to dictatorships in order to maintain full employment in the country, it would spell the end of democracy and the welfare state in Austria.

Austria's Minister of Interior, Mr Lanc, tried to halt youth protests on the issue by declaring that the export of tanks to Argentina was legal. Youth organisations called this declaration a "disastrous rebirth of realpolitik."

Ours is a Magnificent Land-1

I sleep in the sewers
of my homeless cities.
But I have builded
a marbled Taj Mahal.



I hunger when famine
stalks the land.
But I have saved it
from plague and pox.

I taught my child
the arts of Science.
But I have seen him
forsake my shores.

I befoul my cities
because I will not plan.
But I have looked up
and discovered Quasars.

I see food hoarded
while my poor go hungry.
But I have made the
green revolution happen.

I never taught my children
to read nor write nor count.
But I have fathered
Nobel laureates.

I see my brother outraged
by my prejudice
But I have elevated him
to the highest office.

I flee from the farms
to the despair of my cities.
But I have held to the hope
of a hundred million jobs.

I was born to subsist
on a half-Rupee daily.
But I have died so my ashes
can enrich my loved India.

I am sad.
But I am glad.
I am.

Ours is a magnificent land.
We must build a
magnificent future. Think Ahead.

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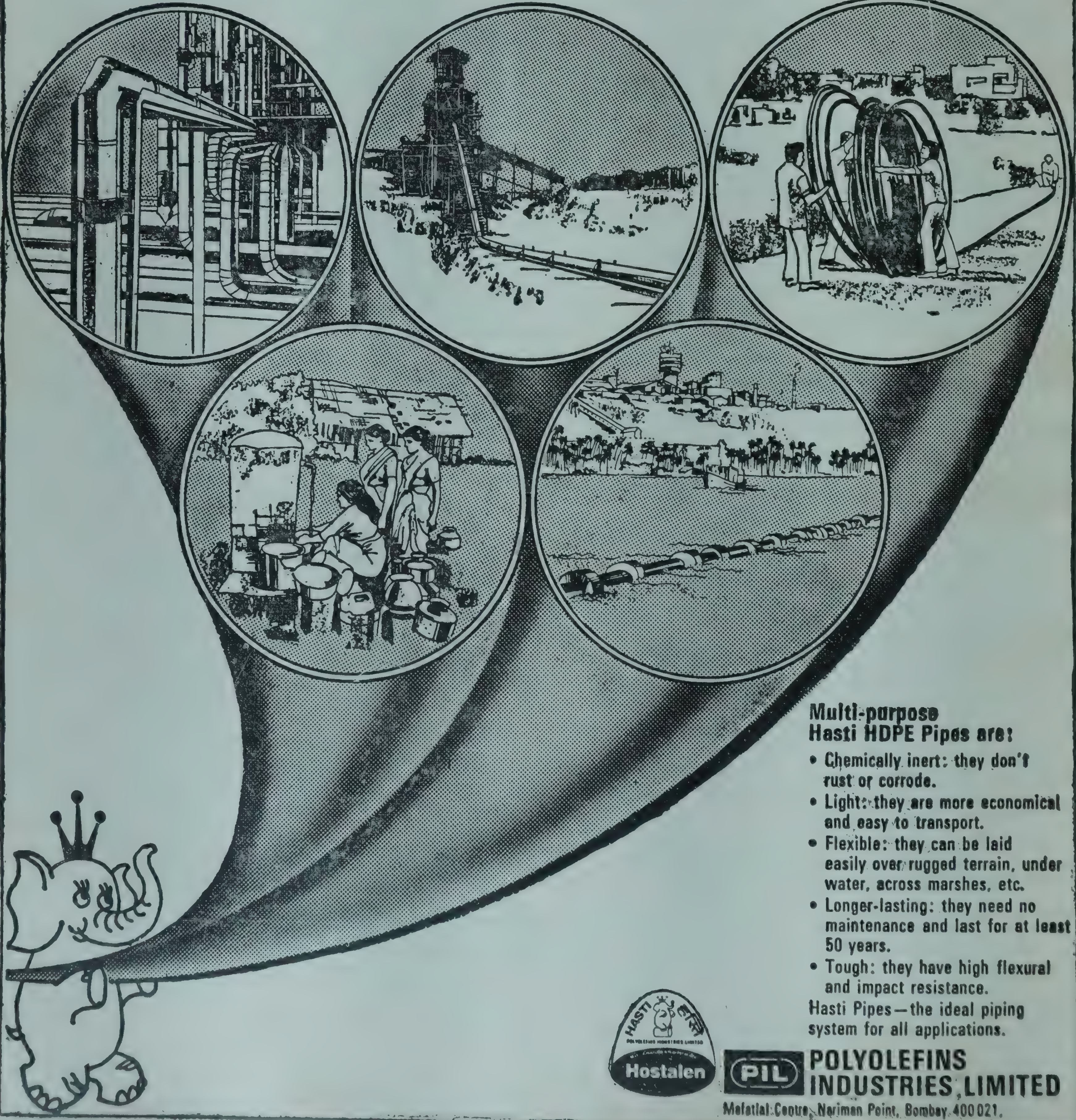

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BOOKS & IDEAS

Extending South-South contact

Between Underdevelopment and Revolution: A Latin American Perspective

By Rodolfo Stavenhagen

Abhinav Publications, E-37 Hauz Khas, New Delhi-110 006, 1981, *Pages vii,* 204; *Price Rs* 75.

This is a collection of eight essays by the well-known Mexican sociologist, Rodolfo Stavenhagen, that were published earlier in different journals. The essays discuss the socio-economic-political situation in the countries of Latin America as they also deal with the character of the general assumptions and propositions put forward by writers on Latin America. As a justification for publishing these essays in India, Prof Stavenhagan draws attention to the "differences between Asia, Africa and Latin America as regards their social and economic processes" and expresses the hope that "this volume will erase some of the barriers ...to scholarly South-South exchange and to a better understanding by interested readers in Asia of the problems of Latin America."

This volume has to be welcomed from the point of view of extending South-South contact, which has been, for one reason or the other, rather tenuous—of which an example is provided by the fact that it took thirty-four years for India to conclude the first ever trade agreement with Argentina, an important Latin American country: On July 28, Mr Pranab Kumar Mukherjee, Union Minister for Commerce and Mr Carlos Garcia Martinez, Minister of Foreign Trade of Argentina, signed the three-year trade treaty. Of course, earlier India had concluded such an agreement with six other Latin American countries—Brazil, Chile, Columbia, Cuba, Guatemala and Peru.

Prof Stavenhagen points out that much of the writing on Latin America is vitiated by the propagation of wrong ideas about the character of these countries and the development therein. In this context he has selected seven fallacies that are widely prevalent in the writings on Latin America and refutes them point by point. The first fallacy is that the Latin American countries are dual societies by which it is sought to be made out that the desired capitalist transformation of society is being thwarted by the persistence of feudalism. The author seeks to show that the fact is the other way round. The underdevelopment of the economies is more the result of the way capitalism developed, creating zones of colonial metropolis exploiting the other regions in the countries of Latin America. He identifies this internal colonialism to be the dominant characteristic of the Latin American society and the root cause of their poverty and backwardness (the Indian situation bearing a strong resemblance to the situation).

The second fallacy is that progress in Latin America will come about by the spread of industrial products into the backward, archaic and traditional areas, while in fact what has often happened is nothing but an extension into the rural areas of monopolies and monopsonies with disastrous consequences for the economies and societies of the poorer countries. "The progress of the modern, urban and industrial areas of Latin America has taken place at the expense of backward, archaic and traditional zones" (p 8). The destruction of the village industries in India in the face of unequal competition from consumer goods produced by the organised industries—often owned by transnationals—provides a close parallel.

The third thesis he blasts is that the creation of a national market is thwarted by the traditional, backward and archaic rural areas and the growth of a progressive and national capitalism is impeded thereby. The fact is that no progressive or national capitalism exists in Latin America. Moreover income distribution has an important bearing on the size of the market. When in the so-called developed metropolis the market is divided between the few affluent rich and the much more numerous poor with low purchasing power, it is difficult to accept the thesis that the local capitalists are interested in the creation of a truly national market. "If the internal market were indeed the driving force of Latin America's bourgeoisie, Mexico's capitalists would not be seeking, as they are, investment opportunities in Central America, or Brazils, in Paraguay and Bolivia; they would not be exporting millions of dollars a year to the security of American and European banks; they would, instead, favour more equitable tax policies, lower profit margins and higher turnovers, lower prices for their products, and higher levels of production. Generally, however, they favour none of these things," writes Prof Stavenhagen. Do we see an Indian parallel here also?

The fourth thesis that the national bourgeoisie is interested in breaking the power and the domination of the landed oligarchy is also shown to be untenable, since in more than one Latin American country the families associated with foreign capital are also the owners of the major feudal latifundias.

The fifth erroneous thesis, according to Prof Stavenhagen, is that Latin American development is the work and creation of nationalist, progressive, enterprising and dynamic middle class and the social and economic policy objectives of the Latin American governments should be to stimulate "social mobility" and the development of the class. He starts by questioning the correctness of the definition of "middle class" as the term is a euphemism for "ruling class"—a class that has power in the society, occupies the apex of the social, economic and political pyramid and makes the overall decisions that affect these countries. Such a class is by no means a "middle" class. Moreover the stress on the so-called "middle class" often obscures the tensions, oppositions and conflicts between ethnic groups.

The sixth thesis he exposes as unsound says that national integration in Latin America—where countries have major ethnic problems arising out of the presence of people belonging to different ethnic groups like the Indians and the Negroes—is the product of miscegenation (*i.e.* ladionisation)—acculturation of the Indians in the pattern of the European colonisers. He points out that national integration is intimately bound up with the disappearance of *internal colonialism*—exploitation of the vast majority by a minority—rather than with the development of a new biocultural category.

Prof Stavenhagen rejects the seventh thesis which stipulates that progress in Latin America will only take place by means of an alliance between the workers and the peasants, as a result of the identity of interests of the two classes. Not that he denies the desirability or the possibility of such an alliance but considers it unlikely to come about in the near future because of the social configuration of *internal colonialism* as, in not a few cases, benefits obtained by the working class are usually obtained at the cost of agriculture—*i.e.* the peasants, The urban working class is very much a beneficiary of internal colonialism, which is the greatest single obstacle to economic and social development in Latin America.

The rural population in Latin America has the lowest standard of living among the population in the countries there and its income is half the national average. A study of seven Latin American countries disclosed that a small part of the agricultural population possesses or controls most of the land and other productive resources in the rural areas. Between 60 per cent and 90 per cent of agricultural population exist in conditions analogous to those of the medieval European serf, with extremely low wages and suffering from disguised unemployment. Agrarian reform is the most important task in Latin America. The intolerable rural living conditions have given rise to the phenomenon of urbanisation without industrialisation with concomitant "structural marginalisation" for a very large number of the people who are integrated into the system at the lowest level and condemned to suffering the worst domination and exploitation.

Latin American countries thus exhibit the traits of what Prof Stavenhagen calls "Dependent Development"—*i.e.* a development whose characteristics are fixed by external dependency and in which industrialisation does not reduce the country's dependence on imports (but only substitutes some imported goods for others) or the exports of raw materials and the country's economy comes to be dominated upon by the multinational corporations. He discusses in some detail the economic and political tasks ahead in the Latin American countries.

The final chapter is entitled "Decolonializing Applied Social Sciences" which is of particular interest to Indian academicians and writers. Prof Stavenhagen paraphrases Marx and says, "I hold that the most fruitful social theory is the one that may be validated not by any amount of statistical verification but by the practical day-to-day problem-solving of real-life issues." (Pp. 183-184) He goes on to ask : "Can books about peasants be brought to the attention of, discussed with and used by peasant organisations? Can studies on urban migrants be made to help labour unions and neighbourhood voluntary associations to better understand, and thus solve, their problems? Cannot studies on social movements, popular rebellions and revolutions be shorn of their scientific and scholarly paraphernalia and made available to the revolutionaries themselves? How many studies do we have of political elites and their decision-making processes; of the functioning of bureaucracies; of entrepreneurs (not only as innovators or modernisers but as political and economic interest groups); of foreign business communities in underdeveloped countries; of corruption among labour leaders; of advertising and the manipulation of ideologies, opinions, attitudes, tastes and the innermost emotions; of the role of estate owners in the maintenance of traditional agrarian society; of regional and local *cacicazgos* or *coronelismo;* of the influence of foreign diplomatic missions on national politics; of ecclesiastical hierarchies; of military cliques; of the role of the mass media; of oppressive educational systems; or simply of the varied and multiple aspects of repression (physical, cultural, psychological economic) that dominant groups use to maintain the *status quo?*"

These questions are very much relevant in the specific context of our own country as well.

Subhash Chandra Sarker

BUSINESS MANAGEMENT

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BOOKS RECEIVED

Commodity Trade Statistics 1978—Statistical Papers Series D Vol xxviii, No. 1-19, United Nations Publications which may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 262. Price $ US 4.00.

Commodity Trade Statistics 1978—Statistical Papers Series D Vol xxviii, No. 1-17, United Nations Publications which may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 294; Price $ US 4.

Commodity Trade Statistics, 1979—Statistiral Papers, Series D Vol xxix, No. 1-3, United Nations Publications which may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 302; Price $ US 4.

CORPORATE SECTOR

Mahindras: Substantial increase in output

In a major expansion programme with a capital cost estimated at Rs 75.78 crores, Mahindra & Mahindra Ltd (M&M) has planned to enlarge and modernise the manufacturing facilities for jeeps, light commercial vehicles and tractors, as also to update the diesel engine technology. This was announced by Mr Keshub Mahindra, chairman, at the extraordinary general meeting of the company held recently. The entire programme is expected to be completed by 1984.

Mr Mahindra stated that the installed capacity of 15,000 units per annum for jeeps and light commercial vehicles, as of 1979, will be expanded to 25,000 vehicles per annum. As part of this programme, the new plant at Nasik will cater exclusively to the assembly of light commercial vehicles, he said. Concurrently, the manufacturing capacity of tractors is also being expanded from 10,000, as of 1979, to 15,000 per annum.

The company's production has shown a substantial rise. The output of jeeps and trucks showed an increase of nearly 30 per cent to 16,574 from 12,280 in the financial year of 1980. The output of tractors increased by 22 per cent to 9,539 from 7,813.

Mr Mahindra explained that the financing for the capital cost of Rs 75.78 crores, is made up of loans aggregating to Rs 56.56 crores and internal cash generation amounting to Rs 19.22 crores. Including the interest on loans during the project period, and the additional working capital, Mr Mahindra stated further that the total project cost is estimated at Rs 110 crores.

An investment agreement has been signed, according to Mr Mahindra, with the International Finance Corporation, Washington DC, USA, for a loan of US $15 million (Rs 12.39 crores). Arrangements for loans from the all India financial institutions and banks are in an advanced stage, he elaborated. At the same time, steps are being taken to avail of project finance from the Export Credit Guarantee Department of UK, and a sales tax incentive loan from the State Industrial & Investment Corporation of Maharashtra (SICOM).

Mr Mahindra pointed out that a technical collaboration agreement has been signed with Automobiles Peugeot, France, for the progressive manufacture of the fuel efficient XDP 4.90 model of the diesel engine which will be manufactured in a plant to be set up at Igatpuri.

Forthcoming company meetings

AUGUST 8 TO AUGUST 14

THE TATA IRON & STEEL COMPANY LTD, Birla Matushri Sabhagar, 19, Sir Vithaldas Thackersey Marg, Bombay-400 020. (*August* 11, 3-45 *p.m.*)

MAFATLAL ENGINEERING INDUSTRIES LTD, Rama Watumal Hall, K. C. College Building, Dinshaw Wacha Road, Bombay-400 020. (*August* 12, 3-15 *p.m.*)

THE TATA ENGINEERING & LOCOMOTIVE COMPANY LTD, Birla Matushri Sabhagar, Sir Vithaldas Thackersey Marg, Bombay-400 020, (*August* 14. 3.45 *p.m.*)

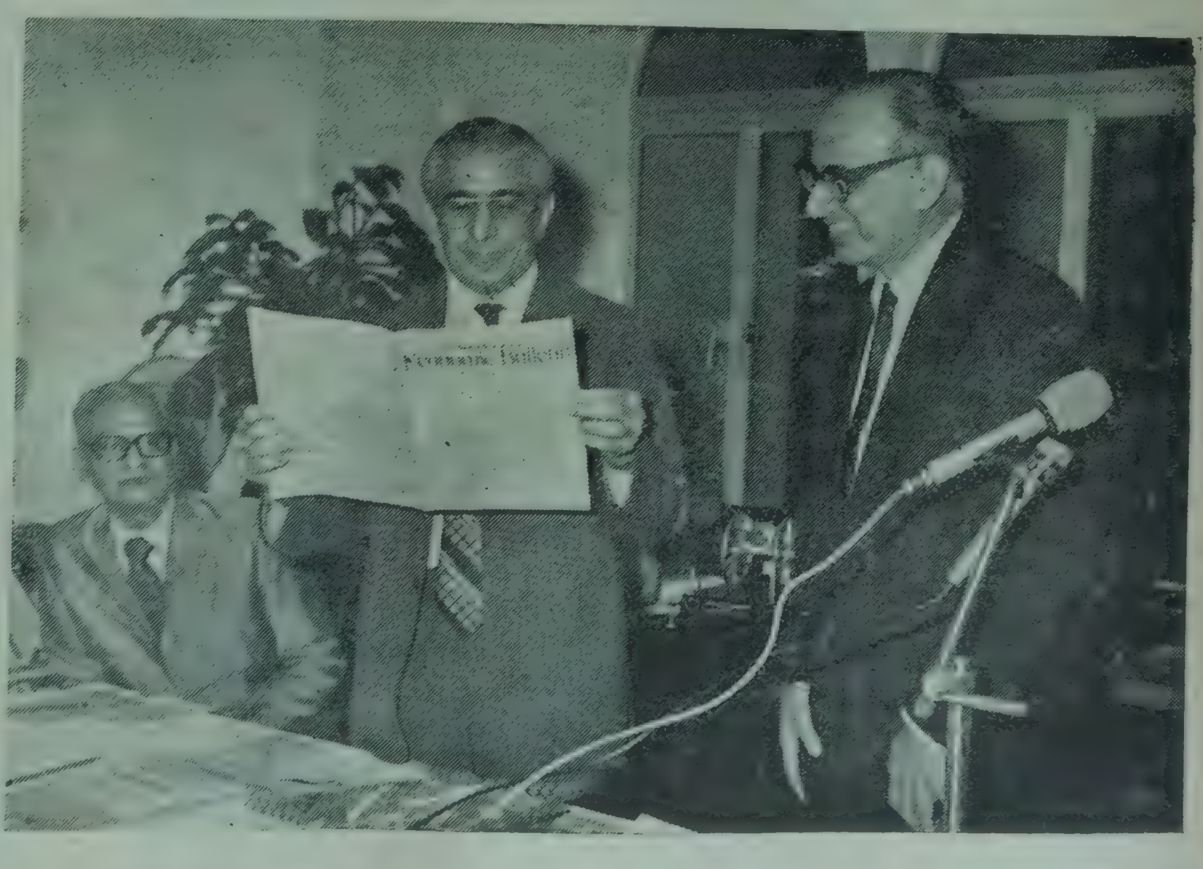
PUBLIC SECTOR

Central Bank of India's Economic Bulletin

While India's standing in the fields of agriculture, industry and technical manpower gets due recognition in economic writings, largely its achievements in the field of banking have gone unnoticed, said Dr Fredie Mehta, Director, Tata Sons Pvt Ltd. The importance of banking system in the country's economic development is growing in that it is shouldering the responsibilities which used to be a budgetary function a few years ago, he added. Dr Mehta made these remarks as the chief guest on the occasion of releasing the first issue of *Central Bank of India Bulletin* here recently. Earlier in his welcome address Mr B. V. Sonalker, chairman and managing director of the Central Bank of India, conceded that although there were a series of monthly bulletins by other banks, Central Bank had the advantage of wide network of nearly 2,000 branches and it hoped to contribute articles of topical interest.

Speaking on the occasion, Prof M. L. Dantwala welcomed the publication and said that it was necessary to educate not only the public and the depositors but also the top bank managers. In particular he urged the top executives in the banks to pay attention to the evaluation reports made by their own banks.

Edited by Dr D. P. Pandey, chief officer, economic intelligence department of Central Bank, the *Bulletin* in its first issue contains, among others, a study on 'Economists in Bank Management' by the Editor himself.



Dr F. A. Mehta, director, Tata Sons Ltd, seen releasing the first issue of Central Bank of India Economic Bulletin. On his left is Mr B. V. Sonalker, chairman and managing director of Central Bank of India. At extreme left is Mr T. M. Gopalswamy, general manager of CBI.

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Andhra Sugar		Arun Sugars		Bhopal Sugar Industries		Cawnpore Sugar Works		Maharashtra Sugar Mills	
Industry Group	Sugar		Sugar		Sugar		Sugar		Sugar	
	Year ended September		Year ended September		Year ended September		Year ended October		Year ended September	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	1,030.9	1,276.5	–33.8	–88.2	107.1	147.6	4.7	88.2	245.7	284.5
(i) Paid-up capital (a+b)	394.5	405.1	141.0	141.0	30.0	30.0	40.0	40.0	137.3	137.3
(a) Equity	334.5	345.1	111.0	111.0	17.5	17.5	30.0	30.0	132.3	132.3
(b) Preference	60.0	60.0	30.0	30.0	12 5	12.5	10.0	10.0	5.0	5.0
(ii) Reserves	636.4	871.4	–174.8	–229.2	77.1	117.6	–35.3	48.2	108.4	147.2
2. Borrowings (i+ii)	848.3	602.2	673.9	580.3	113.3	14.7	255.2	45.1	66.4	70.7
(i) Long-term	281.0	221.5	392.7	392 7	1 5	—	18.6	38.6	52.2	48.2
(ii) Short-term	567.3	380.7	281.2	187.6	111.8	14.7	236.6	6.5	14.2	22.5
3. Non-current liabilities and provisions	—	—	1.1	0.2	—	—	—	—	—	—
4. Current liabilities and provisions	356.4	328.3	392.0	479.9	99.7	138.6	323.0	452.4	574.5	560.1
Assets (at the end of the year)										
5. Gross fixed assets	2,336.9	2,514.8	1,047.2	1,058.9	218.7	247.1	526.0	595.1	507.7	542.5
6. Less depreciation	1,058.9	1,196.2	382.5	459.8	146.2	161.8	373.9	393.6	326.5	348.3
7. Net fixed assets (5—6)	1,273.0	1,318.6	664.7	599.1	72.5	85.3	152.1	201.5	181.5	194.2
8. Current assets (i+ii+iii)	953.1	883.9	361.7	366.3	347.6	215.6	429.9	383.3	688.2	704.7
(i) Inventories	542.2	461.1	237.1	170.5	214.1	–141.9	358.5	209.9	500.7	380.3
(ii) Receivables and loans and advances	370.4	374.5	82.2	81.9	28.4	55.6	38.7	65.3	104.8	211.9
(iii) Others	40.5	48.3	42.4	113.9	5.1	18.1	32.7	108.1	82.7	112.5
9. Other assets	4.5	4 5	6.8	6.8	—	—	0.9	0.9	17.2	16.4
Total : Liabilities (1 to 4) or Net assets (7 to 9)	**2,235.6**	**2,207.0**	**1,033.2**	**972.2**	**320.1**	**300.9**	**582.9**	**585.7**	**886.6**	**915.3**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,599.4	1,760.0	926.7	936.0	497.7	634.8	1,104.0	1,404.6	996.0	1,170.8
11. Increase in stock of finished goods and work in progress	12.4	–150.2	–235.8	–77.3	54.6	–53.9	–31.3	–177.6	48.9	–153.1
12. Value of production (10+11)	1,611.8	1,609.8	690.9	858.7	552.3	580.9	1,072.7	1,237.0	1,044.9	1,017.7
13. Other income	33.9	31.6	10.9	17.9	4.2	13.2	10.8	8.1	23.5	19.7
Expenditure										
14. Materials, stores and other mfg. expenses	848.8	824.7	472.8	573.0	396.0	395.8	736.2	754.1	819.0	766.9
15. Current repairs	90.6	91.2	41.5	45.2	19.9	29.7	60.0	70.0	29.5	26.7
16. Salaries and wages	101.9	118.2	70.0	71.5	37.4	43.4	188.8	191.4	73.0	83.7
17. Welfare expenses	7.2	8.4	4.2	5.6	0.2	0.2	10.9	14.3	7.2	9.6
18. Managerial remuneration	0.6	0.6	—	—	0.7	1.8	—	—	—	—
19. Other expenses	138.4	119.8	22.7	22.2	45.8	35.1	24.3	30.4	39.4	50.4
20. Depreciation	150.5	144.4	52.0	78.9	11.5	15.8	30.2	23.8	30.7	30.6
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	308.1	334.1	38.6	80.2	45.0	72.3	33.1	161.1	69.6	69.5
23. Interest	124.6	97.2	120.8	137.9	21.3	14.6	90.0	75.8	37.4	22.9
24. Tax provision	75.0	61.5	—	—	2.0	13.0	—	—	18.4	35.0
25. Profit after tax (22—23—24)	108.5	175. 4	–82.2	–57.7	21.7	44 7	–56.9	85.3	13.8	11.6
Appropriations										
26. Dividends (i+ii)	45.9	57.3	—	—	3.9	4.7	—	—	5.8	13.7
(i) Equity	40.2	51.6	—	—	3.1	3.9	—	—	5.3	13.2
(ii) Preference	5.7	5.7	—	—	0.8	0.8	—	—	0.5	0.5
27. Profit retained (25—26)	62.6	118.1	–82.0	–57.7	17.8	40.0	–56.9	85.3	8.0	–2.1
Total : Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,645.7**	**1,641.4**	**701.8**	**876.6**	**556.5**	**594.1**	**1,083.5**	**1,245.1**	**1,068.4**	**1,037.4**
Operational indicators (per cent)										
(a) Net worth/total net assets	46.1	57.8	..	..	33.5	49.1	0.8	15.1	27.7	31.1
(b) Inventories/net sales	33.9	26.2	25.6	18.2	43.0	22.4	32.5	14.8	50.3	32.5
(c) Operating profit/net sales	19.3	19.0	4.2	8.6	9.0	11.4	3.0	11.4	7.0	5.9
(d) Operating profit/total net assets	13.8	15.1	3.7	8.2	14.1	24.0	5.7	27.5	7.9	7.6
(e) Profit after tax/net worth	10.5	13.7	..	..	20.3	30.3	..	96.7	5.6	4.1
(f) Equity earning/equity capital	30.7	49.2	..	..	119 4	250.9	..	284.3	10.1	8 4
(g) Equity dividend	12.0	15.0	—	—	17.5	22.5	—	—	4.0	10.0
(h) Equity dividend coverage. (No. of times)	2.6	3.3	..	..	6.8	11.5	..	..	2.5	0.8
(i) Paid-up value per equity share (Rs.)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	50.00	50.00
(j) Market price of an equity share (Rs.)	19.50	33.00	6.75	8.75	23.25	47.00	3.75	13.40	43.00	57.00
(k) Gross yield	6.2	4.5	..	..	7.5	4.8	..	..	4.7	8.8
(l) Gross fixed assets formation	10,1	7.6	1.3	1.1	5.2	13.0	3.1	13.1	8.2	6.9
(m) Debt/equity	0.27:1	0.17:1	..	..	0.01:1	..	3.96:1	0.44:1	0.21:1	0.17:1

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometimes made in other items also. Totals may not add up due to rounding off. * 14 months period.

EQUITIES

harp retreat

Bombay, August 3

Scared of a likely second dose of nti-inflationary measures, labour rouble at Century's Kalyan plant nd the reported dim prospects for he world shipping industry, bulls hose to unload a part of their oldings. As a result, equity prices eat a sharp retreat. Activity was estricted and the undertone at he close of the week was diffident.

During the week, the Bombay tock Exchange authorities imposed special additional deposit argins on bulls in respect of 22 crips and on bears in the case of 1 scrips to curb both excessive uying and heavy selling. The adla charges were, however, normal at about 2 per cent.

In view of the labour unrest and he threatened lock-out on August 4 at Century's Kalyan plant, eavy selling developed in the crip. The price dropped from the veek's best level of Rs 831 to lose at Rs 809—a marked loss of Rs 22. The previous closing was at Rs 816. The net loss was, however, seven points.

Standard was quoted at Rs 569 xd against Rs 597—showing a oss of six points even after taking into consideration the dividend of 22 per cent. Morarjee Mills yielded modest ground on deeper rosion in profit margins during he year ended June 1981 despite harp hike in sales.

Shipping shares bore the brunt of selling on reports that the world shipping industry has started facing rough weather after the recent bright fortunes. G. E. Shipping declined by Rs 9.75 to Rs 53.75 and Scindia by Rs 4.75 to Rs 27.

Tata Steel came in for profit-taking and the scrip declined by eight points and TELCO by seven points. ACC slumped by Rs 19 to Rs 159 on renewed offerings. Tata Oil suffered a sharp setback on marked selling pressure, because the announcement of one-for-five bonus issue fell far short of market expectations. The expectations were at least two-for-five. The price tumbled down by Rs 23 to Rs 87. PAL again encountered selling pressure and lost a further 14 points at Rs 238.

In the cash section, Indian Rayon shot up to a new peak at Rs 107 on informed buying. The high level, however, invited profit-taking and the scrip finally wound up at Rs 96, with a smart net gain of 15 points. MICO spurted by 20 points to Rs 485. Shipping shares like Dempo, Chowgule and Ratnakar yielded marked ground on burst of selling activity.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 25-7-81	High	Low	Closing quotations 1-8-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	245.00	245.00	240.00	245.00
Bombay Dyeing (25)	95.00	99.00	92.50	96.00
Central India (50)	67.00	66.00	64.00	66.00
Century (100)	816.00	831.00	813.00	829.00
Dawn (50)	73.00	77.00	73.00	75.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	122.50*	122 50	—	112.50*
Gokak (100)	209 00	209.00	209.00	209.00
Gwalior Rayon (10)	59 75	62.50	59 00	60.75
Khatau (100)	265 00	270.00	255.00	255.00
Kohinoor (100)	67.00*	67.00	62.00	67.00
Morarjee (100)	260.00	265 00	255.00	255.00
National Rayon (100)	390.00	385 00	375.00	375.00
New Great Eastern (100)	88 00	90.00	88.00	90.00
Phoenix (100)	47 00	47.00	45.00	47.00
Podar (10)	8 75	9.00	8.00	8.00
Shreeniwas (100)	85 00*	—	—	85.00*
Simplex (50)	72 00	72.00	71.00	71.00
Standard (100)	597.00cd	608.00	567.00	569.00xd
Svadeshi (100)	175.00	174.00	173.00	173.00
Swan (100)	240.00	235.00	225.00	225.00
Tata Mills (25)	32.00	33.00	29.50	31.00
Electric				
Ahmedabad (100)	108.00	107.50	104.00	104.00
Andhra Valley (100)	161.00	158.00	152.00	153 00
B.Subarban(100)	119.00	122.50	121.25	122.50
Tata Hydro (100)	160.00	158.00	150.50	150.50
Tata Power (100)	160.00	160.00	150.00	150.00
Steel				
Mukand (10)	26.25	29.50	27.00	28.00
Tata Steel (100)	245.50	384.00	348.00	377.50
Engineering				
Larsen & Toubro (10)	64.00xd	65.50	62.50	63.50
Tata Eng. & Loco (100	652.00xd	662.00	640.00	645.00
S.L.M. Maneklal (100)	200.00	200.00	192.50	200.00
Voltas (100)	225.00xr	226.00	214.00	214.00
Walchandnagar (100)	191.00	200.00	190.00	200.00
Dyes & Chem				
Amar Dye-Chem (100)	170.00	165.00	150.00	158.00
Indian Dyestuff (100)	250.00	252 00	245.00	249.00
Polychem (50)	75.00	75.00	73.00	73.00
Tata Chemical (10)	68.75	71.00	66.00	69.00
Shipping				
Great Eastern (10)	63.50	63.75	53.00	53.75
Scindia (20)	31.75	32.25	27.00	27.00
Cement				
A.C.C. (100)	178.00	186.50	156.00	159.00
Shree Digvijay (100)	175.00	177.50	175.00	175.00
Sugar				
Maharashtra (50)	56.50	57.00	55.00	56 00
Phaltan (50)	43.00*	44.00	43.00	44.00
Miscellaneous				
Bombay Burmah (25)	44.50	45.00	43.00	44.50
Hindustan Motors (10)	28.50	29.75	27.50	29.00
Premier Automobiles (100)	252.00	257.00	236.00	238.00
Pre. Construction (50)	80.00	80.00	78.00	78.00
Sirpur Paper (10)	32.75	35.00	32.50	33.25
Tata Oil (25)	110.00	112.00	82.00	87.00
W. Coast Paper (100)	115.00	117.50	112.50	112.50
Wimco (10)	14.25	16.25	14.00	14.50
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	362.00	365.00	349.00	349.00
Century Enka (100)	1,100.00*	700.00xr	700.00	700.00
Garware Nylons (10)	37.00	38.00	36.50	37.25
Gold Mohur (100)	98.00*	—	—	98.00*
Indian Rayon (100)	81.00	107.00	81.00	96.00
J. K. Cotton (10)	21.00	21.00	21.00	21.00
J. K. Synthetics (10)	53.00	57.00	53.50	54.00
Lakshmi Vishnu (100)	59 .00	60.00	57.00	57.00
Mafatlal Fine (100)	245.00xd	245.00	241.25	242.50
Mafatlal Industries (125)	392.50	392.50	390.00	391.25
Modella Woollen (10)	10.00	—	—	10.00*
Modipon (10)	67.00*	67.00	67.00	67.00
Nirlon (10)	67.00	68·50	63.75	66.00

	Closing quotations 25-7-81	High	Low	Closing quotations 1-8-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50	—	—	162.50*
Raymond Woollen (10)	47.50	59.00	48.00	59.00
Reliance Textile (10)	108.25	109.50	106 50	107.50
S. I. Viscose (100)	277.50	282.50	270.00	270 00
Stretch Fibres (10)	9.50	9.75	9.25	9.50
Swadeshi Polytex (10)	16.00	16.50	15.50	16.00
Electric				
Amalgamated (10)	8.50*	—	—	8.50*
Surat (100) ...	99.00	—	—	99.00*
Cement				
Mysore Cement (10)	34.00	34.50	32.00	34.50
Saurashtra Cement (100)	115.00*	—	—	115.00*
Paper				
Andhra Paper (100)	235.00	235.00	235.00	235.00
Bhadrachalam (10)	19.50*	19.50	18.00	18.00
Jayant Paper (100)	170.00	—	—	170.00*
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	38.50	38.50	36.00	36 00
Ferro Alloys (100)	297.50	295.00	290.50	292.50
Hind Aluminium (10)	55.00	59.50	54.00	58.00
Khandelwal Ferro (100)	140.00	140.00	125.00	130.00
Mahindra Ugine (10)	56.00	59.00	56.00	58.00
Tata Yodogawa (100)	130.00	132.50	130.00	130.00
Engineering				
Associated Bearings (100)	392.50	392.50	387.50	390.00
Bimetal Bearings (10) ...	43.00	44.00	42.00	43.00
Blue Star (10)	39.00	40.00	38.25	38.25
Elecon Engineering (100)	452.50	435.00	425.00	435.00
Gujarat Steel Tube (100)	700.00	700.00	680.00	690.00
Hindustan Brown (100)	306.25*	307.50	305.00	305.00
Ingersoll-Rand (10) ...	106.50	106.50	100.00	103.50
Jyoti (100)	230.00rd	250.00	230.00	250.00
Kirloskar Cummins (100)	550.00	260.00	555.00	557.50
Kirloskar Oils (10) ...	33.00	34.00	33.00	33.00
Kirloskar Pneumatic (10)	58.00	60.00	57.00	57.00
Mahindra (10)	56.50	61.00	56.00	56.00
New Standard (100) ...	125.00	130.00	125.00	125.00
Sandvik Asia (100) ...	352.00	350.00	345.00	350.00
Vulcan-Laval (10) ...	35.00	35.50	34.50	34.50
Zenith Steel (10) ...	57.00	51.00	47.00	47.00
Cables & Elec.				
Asian Cables (100) ...	337.50*	—	—	337.50*
Bajaj Electricals (100) ...	182.50*	—	—	182.50*
Crompton Greaves (100)	375.00*	380.00	370.00	380.00
Otis Elevator (10) ...	54.00	54.00	50.00	50.00
Siemens India (10) ...	55.00	56.50	55.00	56.00
Chemicals				
BASF (10)	60.00	59.50	57.00	59.00
Bayer (India) (100) ...	260.00	265.00	250.00	257.50
Chem & Fibres (10) ...	22.50	22.50	21.25	22.50
Colour-Chem (100) ...	212.50	235.00	212.50	235.00
German Remedies (10)	26.00	25.50	25.50	25.50
Gujarat State Fert. (100)	431.00	433.00	418.00	418.00
Hindustan Lever (10) ...	43.00	45.00	43.00	44.50
Indian Organic (100) ...	330.00	330.00	313.00	320.00
National Organic (100)	236.00	235.00	225.00	225.00
Pfizer (10)	25.50	26.50	25.25	26.50
Polyolefins Ind. (100) ...	310.00	315.00	302.50	315.00
Sandoz (10)	27.50	28.00	26.75	27.00
Synthetics (100) ...	110.00	110.00	104.00	104.00
Warner-Hindustan (10)	24.00	24 50	24.00	24.50
Zuari Agro (10)... ...	26.00	27.50	26.00	27.00
Miscellaneous				
Bajaj Auto (100)	1,900.00	1,900.00	1,830.00	1,830.00
Bombay Oxygen (100)	122.50	120.00	120.00	120.00
Cadbury (10)	20.50	21.00	20.00	21.00
Camphor & Allied (100)	230.00	240.00	220.00	220.00
Ceat Tyres (100) ...	200.00	207.50	200.00	207.50
Colgate-Palmolive (10)	146.00	147.00	143.00	143.00
Empire Industries (15)	29.50	30.50	29.50	29.50
Fibre glass (10) ...	19 25	20.00xr	18.50	18.50
Gammon India (10) ...	25.50	25.25	23.25	23.25
Hindustan Ferodo (10)	40.00	—	—	40.00*
Hoechst Dyes (10) ...	27.00	27 00	26.50	26.50
Indian Hotels (10) ...	100.00	97 .00	92.00	92.00xd
Motor Industries (100)	465.00	485.00	460.00	485.00
Tata-Finlay (10) ...	13.00	13.00	1 .50	12.50

Notes: Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

Market Gossip

Pak cotton for India

IT is good that New Delhi accepted the plea of the Indian Cotton Mills' Federation that a shortage had developed in the short- and medium-staple cottons and that imports be made of the fibre so essential to the textile industry. The Federation had sought the import of ten lakh bales of cotton, but the Government has conceded the demand only partly. Last week the Cotton Corporation of India negotiated a deal with Cotton Export Corporation of Pakistan Ltd for the purchase of one lakh bales of medium staple cotton. The negotiations lasted over a week and there was no indication of an agreement being reached till the last round of talks.

Reliable sources have indicated that these imports would consist of four varieties and the quantity of each type expected to be imported is between 20,000 bales and 30,000 bales. The price charged by Pakistan will be in the range of Rs 4,680 to Rs 5,025 per candy and the entire deal is for September. The prices are on the c & f basis and the mills will have to incur an additional expenditure of about Rs 250 to Rs 300 per candy by way of L/C charges, interest clearing and forwarding charges and CCI commission.

The southern India mills which supply yarn to handlooms and which had complained the most about the shortage of this type of cotton will get a preference in the allotment provided of course they keep the yarn prices stable. Exporting mills will also be given a preference but, of course, the question of preference will arise only in case the demand exceeds the volume of imports arranged. In fact the Commerce Ministry has stipulated an export obligation of 1 kg of textiles against 1.4 kg of imported raw cotton.

A situation of shortage in medium staple varieties could have been avoided if the Cotton Corporation had not exported this variety at the beginning of the season. The Corporation reportedly shipped abroad five lakh bales of the fibre in its anxiety to dispose of what it considered was mounting stocks with it. It has now contracted to sell the longer variety of *Suvin* mainly to Indonesia. It is strange that the *Suvin* variety should find no customers among mills and we should be compelled to export it. One estimate made is that if the industry goes "finer" as much as five to six lakh bales of cotton can be saved. But the problem for the industry is the unproportionate excise duty that finer cloth attracts. Cotton exports can be understood if there is surplus yield but we are not in that happy position.

Bullion: Reduction in sales tax ?

THE bullion trade in Maharashtra has been upset over the new sales tax of four per cent which came into force from July 1. For three days most of the bullion shops in Maharashtra suspended their business and now again are threatening to launch an agitation from August 15. A decision to this effect was reached at a meeting of the representatives of bullion trade in Nagpur. The trade talks freely of many of them shifting their business to Gujarat and Madhya Pradesh where the sales tax on gold and silver ornaments and primary metal is much lower than in Maharashtra.

A feeling has grown, however, that the Maharashtra Government may consider a reduction in the sales tax to one per cent and pass a legislation to that effect in the monsoon session. There has been no official indication to this effect as yet. But the trade considers that in view of the hardships caused to it and the representations made by it the government will concede the point. If Maharashtra's sales tax is reduced to one per cent, it will be more or less of the same order as in Gujarat and Madhya Pradesh. The off-shoot of the sales tax being raised to four per cent has been that the arrivals during July were the lowest in recent years. Silver arrivals which were of the order of 5,000 kg a day have gone down to 50-60 kg a day. Similarly gold arrivals which totalled 30-40 kg have gone down to 5 kg a day.

Silver smuggling from China too

SILVER is not smuggled out of only India. Surprisingly this also happens in China and reports have it that during the last 18 months London dealers estimate that as much as $200 million worth of silver coins have been sent out from China to European refineries. If fast-moving mechanised *dhows* operate on the Indian coast to transport silver to Dubai and bring in gold from that Shaikhdom silver is taken out of China by small fishing boats plying illegal trade with Hongkong. The flow has been largely in the form of silver coins of Chinese origin and minted in places ranging from the US and Mexico to Vietnam and France. When last year the price of silver shot up to $50 an ounce many tonnes of these coins reportedly buried in underground hoards, following the post-1949 clamp down on private ownership of gold and silver, were unearthed to be sent to Hongkong. As in the case of India the flow has slackened with the sharp drop in silver prices to $8.5 an ounce but smuggling still continues. Silver stocks in China in 1932 were put at 50,000 tonnes worth $15 billion at present prices. The official holdings currently are believed to be only worth $2 billion.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*July 27, 1981*	*A week ago*
Groundnut	(*Rajkot*)	538	538
Rapeseed	(*Kanpur*)	534	534
Sesamum	(*Delhi*)	625	620
Castorseed	(*Kanpur*)	288	283
Linseed	(*Kanpur*)	515	515
Sugar	(*Bombay*) (*a*)	622	606
Cotton	(*Bombay*) (*b*)	4,400	4,400
Jute	(*Calcutta*) (*c*)	240	218
Aluminium	(*Bombay*) (*d*)	1,510	1,515
Copper	(*Bombay*) (*e*)	3,470	3,500
Lead	(*Calcutta*) (*f*)	1,170	1,130
Zinc	(*Calcutta*) (*g*)	1,600	1,580
Gold	(*Bombay*) (*h*)	1,675	1,680
Silver	(*Bombay*) (*i*)	2,250	2,485
Caustic soda	(*Bombay*) (*j*)	620	645
Soda ash	(*Bombay*) (*k*)	238	238

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996, (j) Flakes and (k) Tata

COMMODITIES

Limited activity in cotton

Bombay, July 27

Minor fluctuations were noticed in the spot cotton market during the past week. Business was confined to a few lots of short staple cotton. The focus of attention among cotton traders was on whether the Government of Maharashtra would succeed in persuading the Centre to continue with its cotton procurement scheme.

After a lot of dilly-dallying, the Chief Minister of Maharashtra was able to convince the Centre of the significance of the monopoly procurement scheme for the welfare of the State's cotton cultivators.

The Centre, however, has resorted to considerable dilution of the original scheme, before okaying it. How exactly the scheme will be implemented is still not known. It is quite on the cards that the monopoly character of the scheme will no longer be there as the Cotton Corporation of India will also be operating along with the Maharashtra State Co-operative Marketing Federation. Another point about which no clarification has as yet been made is whether the scheme could continue to depend on the munificence of the Reserve Bank of India as in the past. It is also to be made clear whether the extension of the scheme will be only for one year or for ten years as the State had been pressing for.

Depending on the modus operandi eventually decided upon, one can be sure that the champions of cotton growers in other cotton growing states like Punjab, Gujarat and Tamil Nadu will also stake their claims for emulating the example of the Government of Maharashtra.

The CCI has finalised a deal with the Tamil Nadu Textile Corporation for the supply of 10,000 bales of short and medium staple cotton at a concessional rate. The Textile Corporation owns 14 co-operative mills. Similarly, the CCI has also sold 50,000 bales of cotton to the National Textile Corporation.

The Centre's scheme to promote consumer awareness of handloom products through a national collection of cotton printed sarees was initiated in Tamil Nadu under the auspices of Co-optex, the apex handloom weavers' society in Tamil Nadu. Co-optex has prepared a corporate plan for 1981-82 for achieving a sales target of Rs. 75 crores as against Rs 47 crores in the previous year.

The following has been the trend of prices of some of the leading varieties of cotton :

(Rs. per candy)

	July 24	July 17
Digvijay	5,050-5,100	5,100-5,150
Kalyan	4,800-4,900	4,800-4,900
Saurashtra CO2	4,900-5,100	4,900-5,100
Shankar 4	5,900-6,200	5,900-6,200
Maharashtra H4	5,400-5,550	5,400-5,500
Maharashtra Varalaxmi	5;325-5 425	..
MP H4	5,300-5,450	5,300-5,450
MP Y1	4,950-5,000	4,900-4,050
MP 1007	5,200-5,300	5,200-5,300
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100
Jaydhar	4,850-5,000	..

Rising trend in yarn

Bombay, July 27

A rising trend was noticed in the local yarn market during the past week. The prices of 150D NRC, 120D NRC, 120D CR and 150D acetate was quoted at Rs 51.89, Rs 54.23, Rs 50.66, Rs 54.52, Rs 42.40 as against Rs 50.11, Rs 52.03, Rs 49.56, Rs 52.31 and Rs 41.85 respectively. The price of 100D SIV however, remained unchaned at Rs 55.07.

Jutegoods steadier

Calcutta, July 27

A steadier tone was in evidence in jute goods in the Calcutta gunny market during the past week, reflecting largely speculative buying induced partly by optimism over Government granting cash subsidy to the industry for jute goods exports.

The industry has been urging that in the face of the current recession in demand for jute manufactures, especially for carpet backing, the industry would be able to clear its stocks only by offering concessional price to overseas buyers. This, it said, called for some cash incentive. Prices of both hessian and sacking scored gains as a result of the speculative buying during the week.

It is pointed out that export of jute goods by Indian mills once again suffered a setback during June. Despite a marginal increase in the export of hessin to 15,700 tonnes in June, the overall export despatches declined from 33,300 tonnes to 30,900 tonnes. What is particularly disappointing about the set of statistics released by the Indian Jute Mills Association is the fall in exports of carpet backing cloth from 7,600 tonnes to 6,500 tonnes.

Overseas despatches of sacking well lower at 8,000 tonnes against 9,400 tonnes and of other manufactures by 100 tonnes to 700 tonnes. In June 1980, the total export of jute goods was higher at 35,300 tonnes even though the industry could ship as little as 2,700 tonnes of carpetbacking.

The industry fared still worse in the domestic market which took 55,000 tonnes in June against 62,500 tonnes in May. A lower quantity of 36,900 tonnes of sacking material compared with 44,000 tonnes in May was despatched to domestic consumers. Despatches of hessian fell from 9,000 tonnes to 8,800 tonnes and of other manufactures from 9,100 tonnes to 8,900 tonnes.

Mills reporting to IJMA consumed 5,41,000 bales of raw jute (5,68,000 bales) to produce 94,700 tonnes (98,000 tonnes) in June. During the 1980-81 season the industry consumed a higher volume of 68,65,000 bales against 67,83,000 bales in 1979-80. The industry began the new season (1981-82) with raw jute stocks of 11,48,000 bales. It was also credited with an undelivered balance of 4,82,000 bales. Purchases of raw jute during June were 3,36,000 bales.

The fibre market was steady during the week under review with activity moderate aided by fresh mill buying coupled with absorption by the Jute corpo-

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FORM NO. II A

Form of General Notice to be given to the members of the Public before making an application to the Central Government under Sub-Section 2 of Section 22 of the Monopolies & Restrictive Trade Practices Act, 1969.

NOTICE

It is hereby notified for the information of the Public that I (R. Krishnaswamy) proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi under Sub-Sec. (2) of Sec. 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for the purpose of doing Travel Agency Business.. The estimated turnover of the business is likely to be about 10 lakhs.

1.	Name of the Proposed undertaking	MID-WAY INTERNATIONAL
2.	Details of the management structure	Partnership firm Partners : Sri R. Krishnaswamy 1133, Trichy Road Coimbatore-5. Smt.Srivalli Krishnaswamy 1133, Trichy Road Coimbatore-5. Sri R. Krishnaswamy Father & Guardian for minor Mr. K. Rajesh 1133, Trichy Road Coimbatore-5.
3.	Capital Structure of the applicant	Rs. 25,000/-
4.	Proposed location of the new undertaking	No. 338, Avanashi Road, Coimbatore-641018
5.	Brief outline of the cost of project the scheme & source of finance.	Rs.25,000/- Partner's contribution Further funds will arranged depending on the particular orders from Banks & Internal resources

Any person interested in the matter may make a representation to the Secretary, Department of Company affairs, Government, of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of the Notice intimating his views on the proposal and indicating the nature of the interest therein.

Dated this 22nd July, 1981

Place : Coimbatore 641 005.

Sd/-
R. Krishnaswamy

NOTICE

FORM—IA

(See Rule 4A(I))

It is hereby notified for the information of the public that The Travancore Electro-Chemical Industries Limited, proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (I) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969 for substantial expansion of its activities. Brief particulars of the proposal are as under :—

I.	Name of the body corporate owing the undertaking	The Travancore Electro-Chemical Industries Limited.
2.	Capital Structure of the applicant Undertaking	Authorised Capital—Rs.5 Crores. Issued and subscribed Capital—Rs. 1.50 Crores (as per last audited Balance Sheet)
3.	Details of the proposed substantial expansion (a) Name of New goods to be pro-- duced.	Electrically calcined Anthracite Coke.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of the Notice, intimating his views on the proposal and indicating the nature of his interest therein.

For THE TRAVANCORE ELECTRO-CHEMICAL INDUSTRIES LIMITED

Sd/-
H.P.VYAS
CHIEF EXECUTIVE

Dated, this 1st day of August, 1981.

The Mafatlal Fine Spg. & Mfg. Co. Ltd.

Registered Office :
Mafatlal Centre, Nariman Point,
Bombay 400 021.

To
The Members
THE MAFATLAL FINE SPG. & MFG. CO. LTD.

NOTICE IS HEREBY GIVEN THAT the 50TH Annual General Meeting of THE MAFATLAL FINE SPG. & MFG. CO. LTD., will be held at Patkar Hall, 1, Nathibai Damodar Thackersey Road, Bombay 400 020, on Friday, the 4th September, 1981 at 3.00 P.M. to transact the Ordinary Business and the Special Business mentioned in the Notice convening the said Annual General Meeting. The Annual Report and Statement of Accounts for the Financial Year ended 31st March 1981 are being posted to the Members individually at their registered addresses along with the said Notice.

NOTE

A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND A PROXY NEED NOT BE A MEMBER.

By Order of the Board
N. D SONDE
SECRETARY

Bombay :
Dated : 9th July, 1981

ration of India. As a result, the price of W-5 grade jute was maintained at Rs 231 per quintal throughout the week. Inflow of the fibre was fair normal for this time of the year. The arrivals are expected to gain further momentum, next few month, trade quarters said.

Castor oil better

Bombay, July 27

Prices of castorseed and its oil moved up in the oilseeds market during the past week because millers were showing interest. Export demand for castor oils was, however, at a low ebb. Castor Madras small rose from Rs 318 to Rs 322 and Kanpur bold from Rs 310 to Rs 314 per 100 kg. Castor oil commercial edged up by a rupee to Rs 68.50 and costor oil BSS by 50 paise to Rs 73.50 per 10 kg.

A small rise was noticed in groundnut because of paucity of supplies and limited stocks. Karad bold gained Rs 2 at Rs 629. Saurashtra bold and Saurashtra quality also recorded Rs 2 each at Rs 634 and Rs 638 per 100 kg. Groundnut oil after fluctuating narrowly between Rs 153.38 and Rs 151.84 closed at Rs 152.36 against the previous week's Rs 152.88 per 10 kg.

Imported oils ruled quiet on slack demand. Palmoleine dropped from Rs 142.88 to Rs 141.96, soyabean from Rs 141.50 to Rs 141.44 and RBD from Rs 124.80 to Rs 123.76 per 10 kg.

Linseed and its oil hardened in view of the poor arrivals. Linseed bold advanced to Rs 500 per 100 kg from Rs 480 and its oil to Rs 128.96 from Rs 125.50 per 10 kg.

Among cakes, groundnut expeller looked up by Rs 50 to Rs 2,050 per tonne. De-oiled cake, however, was steady at Rs 1,575 on poor export demand. Likewise, castorseed and cottonseed also remained steady at Rs 775 and Rs 1,600 per tonne.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :

	25-7-1981	18-7-1981
G. Nut		
Karad bold	629.00	627.00
G. nut oil	152.36	152.88
Cast. Md. Sm.	322.00	318.00
Cast. oil com.	68.50	67.50
Cast. oil BSS	73.50	73.00
Linseed bold	500.00	480.00
Linseed oil	128.96	125.50

Foodgrains divergent

Bombay, July 27

A divergent trend was noticed in the grains market during the week under review.

Among cereals, wheat superior receded sharply by Rs. 17 to Rs 275-330 per quintal on good inflow and poor demand. The Saurashtra variety of wheat declined by Rs 5 to Rs 215-235 per quintal as supplies were good from Gujarat amidst slack demand. The undertone was hesitant.

Rice ruled steady. Basmati was traded at Rs 450-600 per quintal and Surti kolam fetched Rs 340-400 per quintal.

Coarse grains ruled steady to better over the week. Jowar gained Rs 3 to Rs 190-225 per quintal. Bajra rose by Rs 10 to Rs 185-230 per quintal on good demand. Maize ruled steady at Rs 155-160 per quintal.

Among pulses, masoor dal spurted by Rs 25 to Rs 515-520 per quintal on limited supplies and good demand. The undertone was steady to firm. Grain prices flared up by Rs 24 to Rs 420-435 per quintal on poor arrivals and encouraging advices from the producing centres. Moong (chumki) rose Rs 12 to Rs 450 per quintal on paucity of supplies. The undertone was firm. Tur dal declined by Rs 7 to Rs 495-590 per quintal as buyers were cautious. Activity in urad (khandesh) was limited and prices dropped by Rs 10 to Rs 310-315 per quintal.

Modest recovery in sugar

Bombay, July 27

Sugar staged a modest recovery in the local market last week with the price of C-30 grade increasing by Rs 18 to Rs 615-630 per quintal. The recovery was attributed to better demand at a lower level. The Centre's decision to release 1.70 lakh tonnes of free sale sugar for domestic consumption in August as against 1.80 lakh tonnes for the current month hardened market sentiments. The State sugar factories too, jacked up their prices to Rs 625 per quintal. The price of sugar C-10 as on July 25, 1981 was Rs 157 per quintal lower than on the corresponding date a year ago.

The wholesale market received 26,083 bags and disposed of 29,655 bags. The week end stocks with the stockists increased to 4,831 bags from 3,572 bags at the previous week end.

Khandsari stocks in the market were virtually exhausted. The commodity was nominally placed at Rs 590-595 per quintal.

Tea : CTC in good demand

Calcutta, July 27

Shipments of tea from Calcutta have improved appreciably in recent months with the removal of some of the chronic constraints at the initiative of the tea exports monitoring cell. Though container availability is much better now with the formation of ICL, the facilities for stuffing and general handling still leave much to be desired.

Meanwhile, at the end of May, production at 122.23 million kg had a record fall of 12 million kg and it was feared that the deficit might be larger at the end of June. Tea arrivals continue to be poor and in fact they virtually came down to a trickle last week as a result of transportation bottlenecks caused by the recent floods in Assam.

During April to May 1981 India shipped out a total of 31,05 million kg of tea against 24.02 million kg in the corresponding period a year ago. The value realised was Rs 54.06 crores and Rs 45.62 crores respectively.

At the weekly leaf tea auctions in Calcutta, the 25,770 packages of CTC tea offered met with a good demand. Dooars brokens were well absorbed by the Punjab and Gujarat buyers. For the larger brokens, there was useful inquiry forthcoming from the USSR which operated for these up to Rs 14.50 per kg. Medium and good liquoring Assam brokens found inquiry from the Gujarat buyers. There was fair support from the blenders as well as the internal buyers. The Gulf and the UK exporters operated for better liquoring kinds. The USSR supported the larger brokens up to a limit of Rs 16.50 a kg.

Good Dooars fannings were steady, whilst the remaining Dooars descriptions were slightly easier. These were accounted for by the Gujarat and northern India buyers. Assam fannings met with good inquiry from the blenders and the UK shippers. Prices for these were irregular and lower by 60 to 80 paise.

The 8,331 packages of Darjeeling teas offered met with fair demand. The USSR continued to absorb the bulk of the black, clean whole leaf grades at last levels. Better liquoring varieties met with selective support from the West German and Japan buyers and levels recorded a decline. All Darjeeling brokens were readily absorbed though at slightly easier rates. Clean brokens saw some inquiry from the USSR with support from the internal buyers. Selective traditional export inquiry was also forthcoming. Fannings followed a similar trend, being absorbed by the local dealers with selective export interest.

The 47,400 packages of orthodox teas offered at the sale met with a good demand. Orthodox brokens met with good demand but at lower levels. Prices for these eased by approximately Re 1 per kg. Whole leaf grades followed a similar trend. The USSR continued to dominate the market whilst there was better inquiry from the buyers for Iran. The Afghanistan buyers competed for the medium descriptions on offer, but at lower levels.

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NOTICE

It is hereby notified for the information of the public that VOLTAS LIMITED proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (I) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities. Brief particulars of the proposals are as under :

(I) **Name of body corporate, owning the undertaking.** VOLTAS LIMITED

(II) **Capital structure of the applicant undertaking as on 31.7.1981)** .. .. Rs.

	Rs.
Authorised :	
9,98,000 Equity Shares of Rs. 100/- each	9·98,00,000
20,000 Equity Shares of 'B' Series of Rs. 10/- each	2,00,000
	10,00,00,000
Issued, Subscribed and Paid up:	
6,27,796 Equity Shares of Rs 100/- each fully paid	6,27,79,600
14,117 Equity Shares of 'B' Series of Rs. 10/- each fully paid	1,41,170
	6,29,20,770

(III) **Details of the proposed substantial expansion :**

(a) Names of the new goods to be produced, supplied, controlled or distributed or of new services to be rendered	Not applicable.
(b) In the case of substantial expansion of existing activities	
(i) Name of goods	Domestic Refrigerators
(ii) Capacity before expansion	11,000 Nos. p.a
(iii) Expansion proposed	89,000 Nos. p.a (Capacity after expansion 1,00,000 Nos. p.a.)
(iv) Location of the project for substantial expansion	Backward area in Maharashtra, to be decided in consultation with the State Govt.

(IV) **Brief outline of the cost of the project, the scheme and sources of finance.**

Estimated cost of the project

		(Rs. in lakhs)
1.	Land and site development	8.00
2.	Buildings	240.00
3.	Plant & Machinery	260.00
4.	Furniture & Office equipment	15.00
5.	Contingency & Escalation.	26.00
6.	Margin money for working capital	43.00
		592.00

Means of finance

		(Rs. in lakhs)
1.	Internal resources	124.00
2.	Capital subsidy from Central Govt. (Pioneer Unit in a notified backward area).	40.00
3.	Secured long-term and medium-term loan from SICOM and All-India Financial Institution	428.00
		592.00

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice intimating his views on the proposal and indicating the nature of his interest therein

VOLTAS LIMITED
V. M. Parekh
Secretary

Dated this 29th day of July 1981

Registered Office :
19, J. N. Heredia Marg, Ballard Estate, Bombay-400 038.

FORM IA

See Rule 4A (I)

Form of general notice to be given to the members of the public before giving a notice to the Central Government under Sub-Section (I) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969.

NOTICE

It is hereby notified for the information of the public that ELECON ENGINEERING COMPANY LIMITED proposes to give to the Central Government in the Department of Company Affairs, New Delhi a notice under Sub-Section (I) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities. Brief particulars of the proposal are as under:

(i) Name(s) of person(s)/body corporate owning the undertaking. ELECON ENGINEERING COMPANY LTD

(ii) Capital structure of the applicant undertaking. (as on 31.12.1980)

(a) AUTHORISED SHARE CAPITAL :

2,50,000	Equity Shares of Rs.100 each	Rs. 2,50,00,000
24,000	9.8% Cumulative Redeemable Preference Shares of Rs.100 each	Rs. 24,00,000
26,000	Unclassified Shares of Rs. 100 each	Rs. 26,00,000
		Rs. 3,00,00,000

(b) ISSUED, SUBSCRIBED AND PAID UP CAPITAL:

1,62,000	Equity Shares of Rs.100 each	Rs. 1,62,00,000
24,000	9.8% Cumulative Redeemable Preference Shares of Rs.100 each	Rs. 24,00,000
		Rs. 1,86,00,000

(iii) Details of the proposed substantial expansion ;

(a) Names of new goods to be produced, supplied, controlled or distributed or of new services to be rendered. — Spiral Bevel, Hypoid Differential Gear Sets' Helical, Spur, Straight Bevel Gears & Worm Gears for Automobiles & Tractors—1000 tonnes

(b) In the case of substantial expansion of existing activities.

(i) Name of goods — Spiral Bevel, Hypoid Differential Gear Sets, Helical, Spur, Straight Bevel Gears & Worm Gears for Automobiles & Tractors-1000 tonnes.

(ii) Capacity before expansion — 10000 Worm Reduction Gear Units. 2500 Helical Gear Units.

(iii) Expansion proposed — 1000 Tonnes per Annum, for items under Sr No. (iii) (a)

(iv) Location of the project for substantial expansion. — In the Company's existing Factory at Vallabh Vidyanagar, Gujarat.

(v) Brief outline of the cost of the project, the scheme and source of finance.

Cost of the Project

Land,	—	Rs. Nil
Buildings,	—	Rs. 100 lacs
Plant & Machinery	—	
Imported	—	Rs. 600 lacs
Indiginous	—	Rs. 200 lacs
		Rs. 900 lacs

Source of Finance

The project will be financed by loans from Financial Institutions, additional capital and partly from our own Internal resources.

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this Notice intimating his views on the proposal and indicating the nature of his interest therein.

For ELECON ENGINEERING COMPANY LTD.,

B.I.PATEL

(Chairman & Managing Director)

VALLABH VIDYANAGAR

Dated this Ist day of August, 1981.

The 20,950 packages offered at the dust sale met with a good demand. Medium and good Dooars CTC dusts were well supported by the internal buyers. There was fair inquiry from the major blenders. Assam CTC dusts were well supported by the Gujarat buyers and the packeteers. For the better liquoring descriptions the Bengal buyers lent good support. Medium varieties sold at around last levels, while the better sorts sold at occasionally dearer rates. Exportable Pekoe dusts met with fair inquiry from the UK shippers. The ARE did not operate. Medium and good liquoring orthodox dusts met with fair inquiry and sold at around last levels. The remainder eased in value.

Aggregate deposits and bank credit expand

Bombay, July 27

Aggregate deposits of the scheduled commercial banks increased by Rs 140.59 crores to Rs 40,542.61 crores during the week ended July 17, 1981. Bank credit expanded by Rs 134.61 crores to Rs 26,732.98 crores. Balances of banks with the Reserve Bank of India (RBI) declined by Rs 123.68 crores to Rs 4,380.69 crores and their borrowings from the RBI declined by Rs 26.26 crores to Rs 545.97 crores.

Gold quiet, silver up

Bombay, July 27

A quiet tendency in gold and an upward trend in silver marked trading in the Bombay bullion market during the past week.

Standard mint gold opened at Rs 1,670 per 10 grams, remained steady at Rs 1,685 per 10 gms from Tuesday to Friday (July 21-July 24) and came down to Rs 1,680 per 10 gms before finally closing at Rs 1,675 per 10 gms. Ready silver (.999 fineness) opened at Rs 2,465 per kg and closed at Rs 2,515 per kg.

Money comfortable

Bombay, July 27

Conditions in the Bombay short-term money market were comfortable during the past week. Both notified and commercial funds opened at 7 per cent but eased to 5 per cent on Tuesday (July 21) and 3½ per cent on Thursday (July 23). The interest rates came to the week's low of 3 per cent on Friday (July 24). The rates however, hardened subsequently to 8 per cent before finally closing at 6½ per cent.

CIBATUL LIMITED

NOTICE

IT IS HEREBY notified for the information of the public that the Company proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under Sub-Section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for establishment of a new undertaking for the manufacture of following goods. Brief particulars of the proposal are as under:

(i) Name(s) of person(s)/Body Corporate Public Limited Company, CIBATUL Ltd. owning the undertaking.

(ii) Capital structure of the applicant.

	(Rs.)
AUTHORISED: 5,00,000 Equity shares of Rs 100/- each	5,00,00,000
ISSUED : 3,00,000 Equity shares of Rs. 100/-issued and fully paid up	3,00,00,000

(iii) Details of the proposed substantial expansion :

(a) Name of new goods to be produced, supplied, controlled or distributed or of new services to be rendered.

	Items of manufacture	Capacity per annum.MT
1	Epichlorohydrine	6000
2	Glycerine	2750
3	Hydrochloric Acid 35%	9120
4	Sodium Chloride	1300
5	Mixture of 1-2-dichloropropane) 1-3-dichloropropene)	840

(b) In the case of substantial expansion of the existing activities :— Not applicable, as we are not going for any expansion of the existing activities.

(iv) Proposed location of the new undertaking — Either at the location of the existing factory a Atul, Dist. Valsad, Gujarat or near Hindustan Organic Chemicals Ltd. at Ambalamugal near Cochin (Kerala)

(v) Brief outlines of the cost of the project, the scheme and source of finance. — Land, Rs. 10 lakhs, Building Rs. 1 crore, Machinery Rs. 15 crores including imported equipment valued at Rs. 1.50 crores c.i.f., Know-how fees approx. Rs. 1.90 crores including basic engineering and commissioning.

The company will decide with financial institutions as to the additional equity capital and term loans that may be required in addition to the internally generated funds to meet the cost of the project.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Date : 23rd July, 1981

Registered Office,
Cibatul Ltd. Atul,
P. O. Atul 396020,
Dist. Valsad, Gujarat

FOR CIBATUL LIMITED

V. M. MODI
SECRETARY

Cooperation: Big push to agro-based industries

Concluded from page 288

ives if they resort to open market operations. This co-operative industry could be effectively made a nucleus of socio-economic uplift of the handloom weavers. It can also implement programme for augmenting the per acre yield of cotton which is lowest in the world in our country.

In Maharashtra State the government has introduced monopoly purchase scheme for cotton. The grower thus is assured of adequate return when he sells cotton to government through the marketing federation. He will not evince any interest in further processing of cotton and cottonseed unless the processing society undertakes activities to guide him in increasing the yield and undertakes to meet his needs of edible oil, or cattlefeed prepared from the cottonseed cake. Permanent arrangement will have to be thought of which will assure supply of cotton and cottonseed to the co-operative units without going to the auctions. A complex can be developed with the marketing federation as one of the partners along with the producers and weavers in the area. This complex can be of spinning mills, ginning mills, oil units, cattlefeed etc. The original concept to enroll only growers as members will have to be modified and enlarged. Further, as in the case of private industries they will have to bring ancillary activities under their fold with a view to bringing stability to the industry.

A few fruit processing societies based on banana, grapes and oranges also failed for the main reason that they depended only on the product. Here too the society will have to undertake processing of different fruits although it can specialise in one item.

From the past experience with agro-based industries in a co-operatively developed state like Maharashtra one can foresee a bright future for them. The co-operators will have to learn from the past mistakes in establishing processing societies in future. Firstly, they will have to increase the share capital base to the extent of 40 per cent of the total project cost. The scheme should be attractive to the producer members and there should be their direct involvement. The co-operative spirit should be evident in working and the benefit should go to the people for whom the industry is established.

Beyond headlines

Cooperation: Big push to agro-based industries

By M. G. CHANDRACHUD

WHEN we think of agro-based industries in co-operative sector we have before us the remarkable progress made by the co-operative sugar factories during the past thirty years. After the establishment of the first co-operative sugar factory in 1950 at Pravaranagar in Maharashtra there are today 185 co-operative sugar factories in the country (as on June 30, 1978). Out of these 128 factories were in production and they crushed 297 lakh tonnes of sugarcane and produced sugar worth Rs 600 crores. Maharashtra State alone accounts for more than 50 per cent of these sugar co-operatives. These co-operative sugar factories have transformed the whole rural area wherever they are in operation. Besides the well-being of the members, the management of the factories have established schools and colleges, hospitals and recreation centres for the general public. These factories have provided employment opportunities in the rural areas and have helped in arresting the migration of rural population to the cities.

Encouraged by this success, efforts have been made in the past two decades to establish other agro-based industries, namely, oilseeds processing, ginning and pressing facilities, rice milling, fruit processing, spinning mills, etc in co-operative sector in different areas in Maharashtra for the benefit of the growers. But these processing facilities could have succeeded and as such even today the growers of these produce have to rely on traders for the sale of their produce.

As back as in 1960 an integrated groundnut processing project was implemented in the co-operative sector in Sangli district where the acreage under groundnut was five lakhs. Twenty oil mill expellers were set up all over the district and a solvent plant was set up at the district headquarters. The grower-members were supposed to give their groundnut to the mill and the mills were to send the oil cake to the solvent plant. The growers were offered advance calculated on the basis of past three years' ruling prices and expected prices in the current year. The balance was to be paid after sale of the oil and cake. The growers, however, were reluctant to accept this arrangement. They insisted for hundred per cent amount no sooner they delivered the groundnut. As a result due to fluctuations in the prices of groundnut oil and cake the project went into red. The oil mills and the solvent plant suffered continuous losses. Price fluctuations apart, the project being conceived only for processing of groundnut, the expellers and the solvent plant were running hardly for 90 to 100 days in a year and that too below rated capacity. It was also revealed that the growers were bringing their produce to the processing societies when prices in the market were low and selling the produce in the market at higher rates when prices ruled better outside. The interests of the institutions established for their ultimate betterment were overlooked for temporary gains.

Another important point that contributed to the failure was the type of groundnut grown in the area. The quality cultivated had only 40 per cent oil as against 45 to 48 per cent in the variety used for expelling purposes. Moreover, unlike the sugarcane, which cannot be stored after harvesting, the groundnut can be stored in godowns even up to a period of one year. The grower can opt for this option if he finds that the prices are not favourable.

Of the integrated units, the solvent plant has now, however, turned the corner and is making profit. The unit was saved because it started processing all types of cakes and rice bran by purchasing in the market. The society also offered its plant to others on "service basis". As a result it worked for all days according to the capacity and made good the past losses. As a "commercial unit" the plant is now working successfully.

Next to sugarcane, groundnut is an important cash crop in Maharashtra and naturally efforts were made to set up oilseeds processing units in co-operative sector. But practically all units failed for reasons stated above. As a matter of fact, edible oil is an item of every day necessity. However, it is unfortunate that the industry is in the hands of traders and there are wide fluctuations in the prices of oil. If past experience is any guide, the co-operative will have to do some rethinking on establishing oilseeds processing units and selling the oil, the cake, etc directly to consumers in cities. One may recollect that when co-operative sugar factories were established, care was taken to approach expert agriculture officer to look after the yield of sugarcane. With this arrangement services of experts were available to the smallest member of the society to augment his yield per acre. In other processing societies this aspect was totally overlooked. If, therefore, oilseeds processing societies are to run successfully they will have to adopt modern practices that exist in private industries and also give attention to increase the farm yield.

Dr Kurien of "Amul" fame has suggested establishment of oilseeds processing industries on the lines of milk societies. The oilseeds from villages would be collected directly from members and supplied to the complex located at a suitable place. This complex would process all oilseeds and oilcakes by putting large expeller, solvent plants. This would facilitate production of commodities required to farmer-members of the complex. If their requirements are also met they will develop more interest in the complex. At present, after the produce is handed over to the society, they have no affection for the processing society. As a result the society remains co-operative only in name.

Besides oil mills, spinning mills, ginning societies and a few cottonseed processing societies were also established by the producers to process cotton which is a cash crop in the Maharashtra State. As is well-known the spinning mills of the weavers have proved more successful than of the producers. In the year 1978-79 there were 88 spinning co-operatives in production. They produced 73.54 million kg of yarn. The production of yarn is only about eight per cent of the requirements of handlooms. There is thus immense scope for growth of composite units of growers as well as weavers. There is, however, no point in organising spinning co-opera-

Continued on page 287

Mr Chandrachud is the chief officer of Maharashtra State Co-operative Bank.

COMMERCE

Vol. 143 AUGUST 15, 1981 No. 3661

EDITOR : VADILAL DAGLI
ASSOCIATE EDITORS : D. B. MAHATME
SUBHASH CHANDRA SARKER

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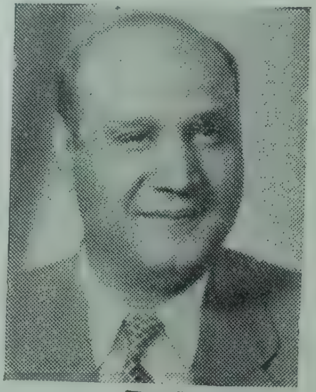
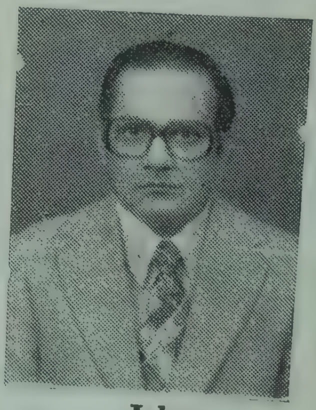


Paul

Mr Stya Paul, the well-known industrialist, has been elected president of the Federation of Engineering Industries of India. He is a founder-member of FEII and has been on its executive council for the last four years. Mr Paul belongs to the Aminchand Payarelal group and is chairman of Apeejay-Surrendra group of companies. His interests cover steel rolling, engineering, shipping, pharmaceuticals, hotels, chemicals, etc etc.

Swaminathan

Mr Anand Swaminathan, former chairman and managing director of Hindustan Organic Chemicals Ltd and Hindustan Antibiotics Ltd, has joined Humphreys and Glasgow Consultants Private Ltd as managing director. Before his present assignment he had a brief stint as contract manager with Humphreys and Glasgow Ltd, London. Mr Swaminathan started his career with Friedrich Uhde, West Germany, and on return to India he worked in NOCIL and Standard Alkali.

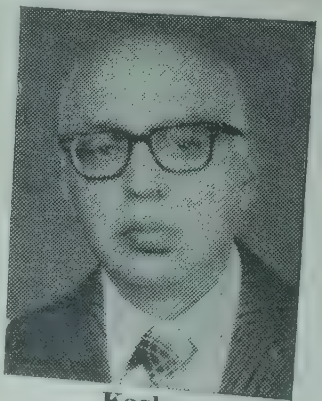


Jalan

Mr R. N. Jalan, who has been elected vice-president of the Federation of Andhra Pradesh Chambers of Commerce and Industry, following the death in a car accident of Mr V. Basavaraju, is the president of Hyderabad Asbestos Cement Products Ltd since 1965. He is also a director of Nucon Industries Pvt Ltd, Hyderabad, and Nigerian Asbestos Industries Ltd in Nigeria, apart from being associated with many industrial organisations in India and Saudi Arabia.

Parthasarathy

Mr R. Parthasarathy, IAS, has taken charge as executive director of Gujarat Narmada Valley Fertilizers Co Ltd, Bharuch. Mr Parthasarathy, who has had a brilliant academic record, taught chemistry at Delhi University before joining IAS in 1963. He has had since then wide experience in various organisations of the Gujarat Government. Before joining GNFC, he was the managing director of Gujarat State Cooperative Land Development Bank.



Kashyap

Mr M. N. Dandekar has been appointed chief regional manager at Aurangabad regional office by the State Bank of India.

Mr D. N. Ghosh, IAS, has been appointed additional secretary and financial adviser in the Ministry of Steel and Mines.

Mr Arjandas Kashyap has been re-elected president of the Indian Stainless Steel Rerollers Association for the ensuing year.

THE WEEK

Prime Minister, Mrs Indira Gandhi, in her keynote address to the UN Energy Conference at Nairobi on Monday has called for a world policy to ensure equitable distribution of conventional energy and joint development of new and renewable energy sources. She attributed the present energy crisis to reckless exploitation of conventional energy by advanced nations.

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The policy for distribution of textile export quota for 1982, finalised by the Government on Monday, raises the share of past performance quotas in the annual level of garments and knitwear by five per cent to 45 per cent. It also empowers the concerned export promotion councils to determine entitlements of exporters.

★

Sugar co-operatives in Gujarat have urged the Union Government to create a separate Saurashtra zone for sugar in order to get a reasonable price for sugarcane produced in the zone. The cost of production there is said to be high owing to scanty rainfall.

★

The import of sub-standard nylon yarn has been decanalised by the Government subject to quantity limit. However, imports will not be under OGL and will be subject to licences to be issued by the JCCI&E.

★

In a reshuffle of cabinet portfolios effected by Prime Minister, Mrs Indira Gandhi, the Planning Minister, Mr N. D. Tiwari, has been shifted to the Ministry of Industry and Dr Charanjit Chanana, who was till now holding independent charge of this ministry, will be now minister of state. Mr S. B. Chavan, Education Minister, has been given the charge of Planning, and the minister of state for education, Mrs Sheila Kaul, will look after the education ministry. The Government also effected wide changes at the secretaries' level.

★

The Union Cabinet has approved the take-over by the Government of Oil India Ltd and Assam Oil Co Ltd. A bill for the purpose will be introduced in the next session of Parliament beginning on August 17. The take-over will be with retrospective effect from January 1, 1977.

★

Maharashtra Government has fixed a target of 17.47 lakh bales of cotton under its monopoly procurement programme for 1981-82 season which is expected to come into being with certain modifications from August-end or early September.

★

Wholesale price index

At 285.0, the latest available wholesale price index for the week ended July 18, 1981 showed a rise of 0.1 per cent over the preceding week and 9.6 per cent over the year.

Money comfortable

Conditions were comfortable in the local short-term money market as of Monday (August 3, 1981). Both notified and commercial funds were renewed at seven per cent. Fresh money was transacted at 6½ per cent.

COMMERCE

Levels of living: Miles to go

INDEPENDENCE has enhanced the prestige of the country and of the people in the eyes of the world nd has fostered the feeling of freedom and dignity of he individual which is an essential precondition for he development of any nation. Lack of freedom not nly affected us in political matters but equally, nay, ery much more, in economic matters. Freedom has emoved all fetters on the economic and political initiaive of the nation. Consequently Independence has witessed the extension and diversification of agriculture nd industry and the rise in their productivity. Foodrains production has more than doubled; so has agriculural production in general. The growth in industrial prouction has been even more impressive. Simultaneously he expansion in scientific and technical education has nabled the country to possess a large number of qualied persons capable of handling almost any assignment. he dedication and selfless service of some of these cientists and technologists have enabled the country begin to chart its own independent course in some espects. All these achievements are highly creditable nd would seem to indicate a very bright existence for ne people of India. Unfortunately such a desirable ate, which had been so fervently hoped for by those ho had fought for freedom, has not come about and ndependence is yet to have an impact on the vast majoty of the people in terms of an appreciable improveent in their standard of living.

The persistence of abject poverty and helplessness the vast majority of the people represents the most aring failure on the part of those who have been at e helm of affairs of the country since Independence years ago. This failure is all the more deplorable nce the elimination of inequality in all its manifestaons has been the declared policy. The Constitution India itself owes its origin to the resolve of the peoe of India to secure to all its citizens "justice, social, onomic and political; liberty of thought, expression, lief, faith and worship; equality of status and oppornity" and to promote fraternity assuring the dignity the individual. The Directive Principles of State licy of the Constitution say specifically that "the State all, in particular, strive to minimise the inequalities income, and endeavour to eliminate inequalities in tus, facilities and opportunities, not only amongst lividuals but also amongst groups of people residing different areas or engaged in different vocations."

Against this very specific obligation laid down upon se in charge of implementing the provisions of the nstitution of India, what have been the achievements? In 1981 nearly 64 per cent of the people of India are illiterates, the absolute number of illiterates being about 45 crores. In a situation in which a person without education has no scope for participating in the national affairs in any meaningful manner, the illiteracy of such a magnitude puts this vast number of people outside the mainstream of national life, depriving them of all benefits of development. Given the situation, if the fact that nearly 32 crores of people live below the poverty line (i.e. have a per capita monthly consumption expenditure of Rs 76 or less at the 1979-80 prices, corresponding to a minimum daily calorie requirement of 2,400 per person in rural areas, and an expenditure of Rs 88 or less, corresponding to calorie requirement of 2,100 per person in urban areas) does not come as a surprise, it does not become any the more acceptable or desirable. What is still worse is that without a radical change in the orientation of the Government's policy there is not going to be improvement in the condition of living of many crores of people in the near future. By the end of the Sixth Five Year Plan, in 1984-85, there would be still nearly 28 crores of people living below the poverty line. If all the measures for the redistribution of income envisaged in the Sixth Five Year Plan are actually carried out, even then the number of people living below the poverty would be around 22 crores—or about 30 per cent of the expected population of nearly 72 crores. This will be the picture at the end of the 34th year of freedom!

The Sixth Plan projection of the population below the poverty line in 1984-85 shows the continued irrelevance of planning. While the 30 per cent of population at the top of the income bracket accounts for 52 per cent of the total household consumer expenditure in rural areas and even more (54 per cent) in the urban areas, the 30 per cent of the population at the bottom of the income bracket shares only 15 per cent of the total household consumer expenditure in the rural areas and about 14 per cent in the urban areas. Another disturbing feature is that the growing costliness of food has obliged the people, both in the rural and urban areas, to spend a higher proportion of their budget on paying for food over the years. While, according to findings of the National Sample Surveys, in 1970-71 food expenditure of the people constituted about 74 per cent of the total expenditure in rural areas and over 64 per cent in urban areas, by 1973-74 the proportion of food expenditure went up to 75 per cent and 68 per cent respectively in the rural and urban areas. A still more unfortunate development is the decline in the real earnings of agricultural labourers, occupying the lowest rungs of the income structure. The Rural Labour Enquiry 1974-75 yielded the startling disclosure that over the decade ending in 1974-75, there had been a 12 per cent decline in the real earnings of agricultural labourers.

A still more disquieting development is the decline in the availability of certain essential articles. Between 1950-51 and 1979-80 the per capita availability of pulses declined by about 50 per cent, of milk by six per cent, and of cotton cloth by ten per cent. On the other hand the availability of luxury items (i.e. items not entering into the mass consumption) has gone up. This point to the relative neglect of the task to ensure the production of articles of mass consumption in adequate quantities. Planning, as it has worked itself out in th country has thus been irrelevant for this vast numbe of people. The question of redefining the objectives anc means of achieving the goals of planning to make i relevant to the poor can no longer be kept aside. Th growing voice of protest and frustration arising i various parts of the country only underlines the urgenc of the task.

Planning within circles

THE Planning Commission, after a review of the situation, has decided that, in view of the constraints of resources, no new projects are to be added to those already included in the Sixth Five Year Plan for implementation. The effort of the Commission would now be to ensure that all the programmes already included in the Plan are implemented. This conservative approach has been imposed upon the Commission by the knowledge that notwithstanding the measures adopted by the Central Government to augment revenue through raising the prices of petroleum products and mopping up some amount through raising the rate of compulsory deposit by the income-tax payers, the budgetary position of the Central Government is far from being comfortable, the deficit is likely to turn out larger than estimated earlier and that the foreign exchange reserves position is far from comfortable.

One of the factors behind this deterioration in the budgetary position is very much the almost unrelenting rise in prices. During the week ended July 25, 1981, the Wholesale Price Index for All Commodities (1970-71 = 100) reached the all-time high figure of 285.7. This was about 34 per cent higher than the level two years ago and 53 per cent higher than the level three years ago. The two-year old figure is relevant as the Sixth Five Year Plan project costs are stipulated at the 1979-80 prices. This sharp rise in prices has inflated beyond anybody's calculation all costs, including the cost of running the government itself. During the first four month i.e., between March 28 and July 25) of the current financial year (1981-82) the Index rose by as much as about six per cent (an annual rate of over 17 per cent). No budgetary discipline can be enforced if measures are not adopted to arrest and reverse this run-away rise in prices. More than the Central Government, the state governments have been caught up in this inflationary spiral, since they do not have control over sources which could be readily tapped for raising additional revenues and they have even less control over the factors causing inflation. It would not be proper to single out the state governments to condemn them for their alleged reluctance to raise revenues.

There is one area from which considerable revenue could be raised but which now goes virtually untaxed. Agriculture, which draws considerably on the budget of both the Central and state governments, does no contribute much directly by way of taxation. However taxation of agricultural income can never become reality unless there is a consensus among all the political parties to put it beyond electoral politics.

Most important of all, however, is the impositio of accountability on those not fulfilling the Plan target Accountability would make planning both realistic an effective. The Planning Commission has asked project to be estimated at their correct value and not to b underestimated in order to obtain quick clearance. Th Commission is clearly worried about the lack of respon sibility in project formulation. This would be don away with entirely if accountability is imposed. Th imposition of such an obligation is all the more urgentl needed for timely implementation, as the failure in on crucial area tends to impose a brake upon the growt in another crucial area. For example, the unsatisfa tory availability of power has emerged as the most con structing factor in the Indian economy today. Yet th fact that the implementation of the 1980-81 annual pla left a gap of 409 mw in the creation of installed capacity (against the original target of 2,232 mw for th year) has gone virtually unnoticed without anyon being called upon to explain the failure to meet the ta get of additional capacity planned for 1980-81.

Again, planning loses all significance if capacit created at great cost to the people is left unutilised o underutilised. The trade gap during 1980-81 would hav been decidedly lower if imports of aluminium and fe tilisers had not been made or had been lower. Muc of these imports would not have become necessary the available capacity in these two industries had bee better utilised. Widening trade gap is considered factor against undertaking new projects needing import On the other hand the underutilisation of capacity permitted to add to the trade gap by importing commod ties which the country can produce but does not produ in possible quantities. In this context the very lo capacity utilisation (44 per cent during 1979-80 and per cent during 1980-81) of the power plants contribut in no small measure to the constraint on the availabili of power which hampered production during the last tw years.

LETTER FROM WASHINGTON

NORTH-SOUTH DIALOGUE

Reagan promises to show up at Mexico

From HASMUKH SHAH

THE charges of the developing nations that the Reagan Administration is insensitive to issues important to the Third World are becoming so effective in world forums that they are forcing the US Government to change its stance *vis-a-vis* the Third World.

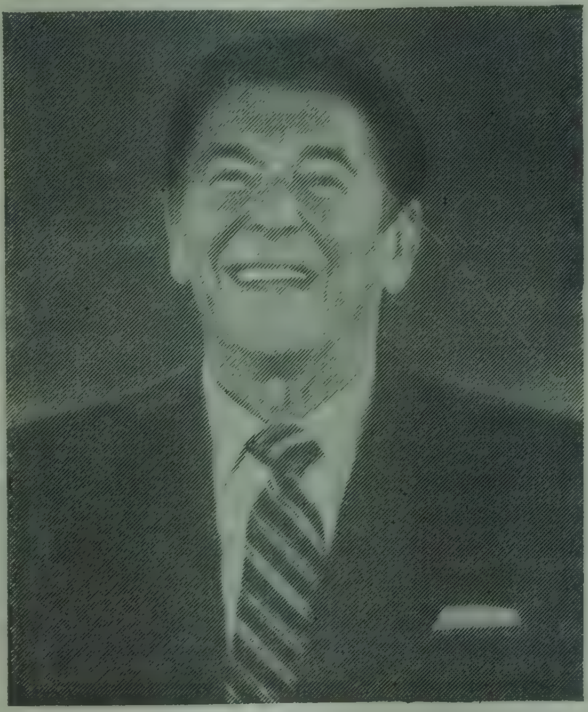
The favourable shift in the US policy towards the Third World was first visible at last month's Ottawa summit of the seven major industrial democracies, when US President Ronald Reagan's Administration subscribed for the first time to the idea of global talks to bridge the economic gap between the wealthy nations of the Northern Hemisphere and impoverished developing nations of the Southern Hemisphere.

Now, further signs of a shift in the US policy in favour of the Third World have emerged at the two-day (August 1-2) conference of foreign ministers of 22 nations—eight industrial countries and 14 developing nations, including India—in Cancun, Mexico's posh Caribbean sea resort. The trend was confirmed at Cancun during the ministerial meeting that determined issues to be discussed at a North-South summit there on October 22-23. Ministers from these 22 nations, ranging from the US, the richest, to Tanzania and Bangladesh, amongst the poorest, decided that the United Nations was the proper forum for global negotiations on the world economy.

The United States had hitherto resisted pressure to negotiate global aid efforts within the world body, where developing nations have a big majority. Delegates from industrialised countries said the new approach of the Reagan Administration would help ensure the success of the October North-South summit, the first time the world's economic iniquities will be discussed at such a high level.

The US Secretary of State, Mr Alexander M. Haig, Jr reportedly indicated in a closed-door session that, while the Reagan Administration gave priority to strengthening the US economy, it was "impossible" to await a United States economic recovery before addressing questions of international co-operation.

In a statement at the Cancun airport before returning to Washington, DC, Mr Haig again stressed the importance of domestic economic policies and urged a strengthening of the world economy "as a result of shared commitment and acceptance of shared responsibility for mutual benefit." "The spirit in which these discussions took place I feel was unusually constructive," he said. "I believe all of us recognise that we have a historic opportunity in Cancun to make a new beginning to relations among our nations. This new beginning would reject the North versus South confrontation and instead examine what we can do to make the world better for all of us and to address the particularly pressing problems faced by a number of the developing nations."



Mr Ronald Reagan

Although President Reagan accepted the invitation of President Jose Lopez Portillo of Mexico last June to attend the Cancun meeting October 22-23, his Administration had until now shown little enthusiasm for the concept of major economic reforms to benefit developing nations. The United States, apparently eager that the Cancun meeting should not become a negotiating forum, insisted successfully at the August 1-2 preparatory meeting of the foreign ministers' procedural discussions that the heads of the state should meet without a formal agenda, prepared position papers or a final communique. Many foreign ministers and diplomats here said nevertheless that Mr Haig had adopted a generally conciliatory posture in private conversations.

"I believe that there has been a real change in US attitudes in the past month," Mark MacGuigan, Canada's External Affairs Minister, said. "The change in the American position is its acceptance of the process of global negotiations. It is hedged, but it is an acceptance."

The foreign ministers decided against a formal agenda for the October summit but agreed on four broad issues for discussions: They are the future of international co-operation for development and the reactivation of the world economy, including food, security and commodities; trade and industrialisation; energy; and monetary and financial questions.

Conference sources said developing countries agreed beforehand not to raise problems at the meeting that could set back international co-operation and development because disputes would hurt themselves.

Some diplomats said the new US attitude owed more to pressures from its Western allies than to increased sympathy toward the developing nations of the South. The French Foreign Minister, Mr Claude Cheysson, seemed to endorse this analysis when he said the United States now had a better understanding of how important the North-South dialogue was for the industrialised nations of the West.

Unlike the United States, countries such as France and Japan are heavily dependent on the South for their raw materials and are sensitive to Third World views. "We form part of an alliance and the United States must, therefore, take our opinion into account," Mr Cheysson said at a press conference.

Noting that the Soviet Union had decided to boycott the Cancun summit meeting, Mr Cheysson said that Washington risked being blamed for any failure in the October meeting. "The fact that the US is willing to participate at the Presidential level means that it is prepared to do something at Cancun," he said. "It is impossible for them to do nothing."

Summarising the results of the August 1-2 talks, the Foreign Minister, Mr Jorge Castaneda, of Mexico emphasised the "excellent atmosphere" of the meetings. "Despite long years of confrontation between two clearly identified groups," he said, "it was truly noteworthy that an exchange of views was possible without confrontation."

He nevertheless cautioned against excessive optimism over what could be achieved in Cancun in October. "Our objectives are modest," he said, "and it could not be otherwise with 22 leaders meeting for only two days. But we hope the summit will be a very important contribution to stimulate the global round of negotiations. It should be an important step along a new road."

In a press statement issued by the ministers, which Mr Haig also accepted, a key phrase said that "a main objective" in October "should be to facilitate agreement with regard to the said global round of negotiations by means of achieving a real meeting of minds and positive political impetus by heads of state or government."

The so-called global round is the latest of numerous attempts by developing and industrialised nations to break their decades-old deadlock in economic negotiations. Since oil prices quadrupled in 1973-74, developing nations have called a series of special UN negotiating sessions for stable commodity prices, greater food aid, debt relief, a bigger say in worldwide lending agencies' policies and access to rich countries' technology and markets for their manufactured products.

The first North-South discussion took place in Paris in 1975 but broke down without agreement after 18 months. Last year at the United Nations, the countries of North and South again failed to agree on an agenda for a global round, with industrialised nations strongly resisting the demand that the development issue be linked and negotiated in a single forum.

Although developing nations have long struggled, and failed, to obtain significant economic concessions from the industrialised North, their position won powerful endorsement last year from a report issued by a special commission on development headed by the former West German Chancellor, Mr Willy Brandt, who also conceived the idea of a North-South conference.

The political significance of the August 1-2 talks, however, is that they will establish the link, if any, between the Cancun conference and the continuing talks in the United Nations and other forums on perennial development questions. The developing nations, for example, would like to see Cancun give immediate impetus to the so-called global round of negotiations between the rich and poor countries at the United Nations, while the United States and Britain want to avoid taking positions in October that would imply concessions in the global talks at the UN.

As in the past, the entire debate about relations between industrialised and developing nations is being ignored by the developed countries of the Soviet bloc, which insist that only the "imperialist" powers are responsible for the backwardness of their former colonies. The Soviet Union therefore refused to attend. China accepted the invitation. But the principal political squabble surrounding preparations for Cancun involved Cuba, which, as current chairman of the non-aligned nations, insisted on its right to participate. But the 11-nation committee organising the conference eventually went along with the United States and did not invite Cuban President Fidel Castro.

Though the US stance towards Third World has softened, it does not mean there is change of heart as far as the United States is concerned. It seems only under heavy pressure from its allies and to please Mexico—an important supplier of oil to the US—did Mr Reagan ever consent to the use of the term "global negotiations" in Ottawa communique—and then as if it was written in lower case.

How President Reagan will react at Cancun is another question. When Mr Haig arrived at the swank Cancun Sheraton Hotel to attend the preparatory August 1-2 meeting, his mission was to keep the summit procedures as informal as possible in the hope of preventing the meeting from turning into an anti-US forum. "We made it clear to Lopez Portillo that we did not want a negotiating session or a communique," said a senior American planner. "The summit is going to be very different from what the developing countries and some of the sponsors want." Ronald Reagan is guaranteeing only to show up in Cancun and to listen.

President Reagan's formula for rescuing the developing nations is rather limited. He believes that, like South Korea and Taiwan, they can arrange their own prosperity, if they adopt the right policies and if the industrial world returns to economic health. Rather than a North-South dialogue, Mr Reagan would prefer bilateral deals, and his ideal solutions do not involve the government at all. "Quite often, the private sector can accomplish what the public sector cannot do efficiently," says Myer Rashish, US Under Secretary of State for Economic Affairs. "The Administration will be looking for new ways of making it attractive for American business to be involved in the development of poor nations."

Thus, the Reagan formula conflicts with the allies' grandeur plans for pumping up the Third World. Due to these sharp differences in the viewpoints, experts see little headway being made in the coming North-South summit dialogue. Yet it is heartening for the developing nations that the United States under Reagan Administration—which was hitherto skeptical to negative about the "global negotiations"—has atleast agreed to participate in the UN forum for "global discussions" on world economy.

Spokesmen for developing nations said they did not expect any binding agreements to come out of the North-South summit, though they did expect participants to come to a general understanding of what needed to be done.

EDITOR'S NOTEBOOK

Vadilal Dagli

THAT the so-called leaders of Indian medical profession, and particularly the Indian Medical Council are basically against the spread of medical facilities in India was again highlighted by a fantastic speech which Dr A. K. N. Sinha made in Bombay recently. Unfortunately Dr Sinha is the president-elect of the World Medical Association. If persons like Dr Sinha would speak for India and perhaps for the Third World, it would be a sad reflection on the quality of compassion of medical profession of this country. Inaugurating the first all-India convention of junior doctors on August 8 Dr Sinha said that during the last 30 years many medical colleges had sprung up without the creation of job opportunities for the young doctors. He also said that if government offered decent emoluments and other facilities, many doctors would be willing to serve rural areas with dedication. Were there enough doctors in the country so that the mobility of medical manpower could be ensured? Dr Sinha said that the number of medical colleges had risen from 23 in 1947 to 112 today. According to him, this was a sad development because it created "a large scale unemployment".

If the rural areas are without medical facilities, if even suburbs of many metropolitan cities are without medical facilities, why should there be unemployment among doctors? Despite massive investments in medical education and in the construction of hospitals, the fact remains that today in our country there are only 1.6 hospitals for 1,000 sq kilometres of area and there are only 79 hospital beds per lakh of population. This is an all-India average. In some states like Jammu and Kashmir, Karnataka, Gujarat, Assam, Bihar and Rajasthan, the situation is worse than what is indicated by the all-India average. Incidentally, when the Government of Gujarat wanted to set up more medical colleges in Gujarat, the medical profession's cartel, which is pompously called Indian Medical Council, had expressed the view that there were enough medical colleges in Gujarat. Can you imagine a situation in a state, which is relatively developed, that it has only one hospital per 1000 sq kilometre area and the government would not permit to set up medical colleges because an anti-people organisation like the Indian Medical Council would not allow it.

Dr Sinha also spoke against the short-term course for the doctors who are called 'bare-foot doctors'. Now at a time when you have absolutely no medical facility in lakhs of villages, to provide minimum medical facilities is considered something objectionable by the Indian Medical Council which forgets the fact that for decades we had LCPS doctors who were as reliable doctors as M.B.B.S. doctors. The managing director of the *Times of India* group of papers, Dr Ram Tarneja, who is a well-known management expert, also spoke at this meeting. He emphasised the point that the society is spending a huge sum on medical education of a doctor. (As a matter of fact the government spends as much as Rs 3.3 lakhs to train one doctor). So the doctors have a social responsibilty of assisting the society to spread medical facilities to rural areas. One can understand the demand for giving more facilities to doctors. But to say that we have more doctors is just to tell a lie. Today we have only one doctor for 2,600 persons. This is why what is required is the extension of medical facilities to those people who are also citizens of India. The time has arrived to consider whether the MRTP (Monopolies and Restrictive Trade Practices) Act should not be applied to medical profession which has become a powerful cartel.

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JEWS suffered the holocaust of Hitler as no race has suffered in human history. It was, therefore, appropriate that after the World War II the Jews got their own State Israel. The State of Israel is the land of the brave people. It is surrounded by hostile Arab countries. But unfortunately Israel is behaving in the same manner as Hitler was treating the Jews. Recently Israel bombed Arab strongholds in Lebanon. Before that it bombed a nuclear power plant of Iraq on the plea that Iraq was making a nuclear bomb. But the recent authoritative announcement from the French who were helping build the nuclear power plant in Iraq has recalled that there was no atomic bomb factory in Iraq. Following the recent attack on Palestinian refugees (who were driven by Israeli from their homeland) Israeli bombs killed 300 persons and wounded 800. So Israel's Prime Minister Menachem Begin, has emerged as a *goonda* of West Asia who has been armed to the teeth by the United States. But the American Government is also getting disillusioned with Israel. It has suspended sale of F-16 fighters and the Defence Secretary is espousing a 'get tough' approach towards Israel. Recently even the usually friendly *Washington Post* published an article on Israeli behaviour which was exasperately entitled "Madman for an Ally". The article by William Raspberry says: "Begin's latest adventurism may be his most dangerous—for Israel. The signs are everywhere that the American people are growing tired of supporting a bully ..The question of what Begin hopes to accomplish by his newest adventures is, so far as US policy is concerned, largely irrelevant. The fact is that America has a madman for an ally."

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THE life and death of Bhupesh Gupta should provide an opportunity for reassessment of the theory of the dictatorship of the proletariat (which in effect means plutocracy by the Politbureau). This is the philosohy of the Communist Party of India and other totalitarian parties preach. Bhupesh Gupta who died in Moscow at the age of 66 on August 6, was a great parliamentarian and a public servant. The way he used parliamentary democracy to further the cause of the underprivileged should convince the communists that in the ultimate analysis social justice can be best achieved through a flowering of plural society. Communists in Italy and Spain have accepted this fact and rejected Stalinist idea of monolithic state where opposition leaders are always in prison. Bhupesh Gupta was both a prison bird and a parliamentary bird. He would be remembered as one of the builders of parliamentary democracy in this country. His great contribution was his courage. While remaining within the discipline of the Communist Party, he followed the path of his conscience and he had only one conscience—social conscience. The fact that all political parties paid spontaneous and full-throated tribute to Bhupesh Gupta would indicate that he lived a life which was far from sectarian.

Special Reports

In search of new sources of energy

From PAVAN SHARMA

NAIROBI

A UNITED Nations conference which is expected to give impetus to the search for new and renewable sources of energy before the oil reserves run out opened here, on August 10, in the presence of 4,000 distinguished statesmen, scientists and other delegates. The conference will last until August 21.

The Indian Prime Minister, Mrs Indira Gandhi, who spoke immediately after the Kenyan President, Mr Daniel Arap Moi, inaugurated the conference, called for a world policy to ensure equitable distribution of conventional energies and joint development of new and renewable sources. She suggested the setting up of an international consortium to mobilise bilateral credit and aid for monitoring the international energy programme.

Both Mrs Gandhi, in her keynote address, and President Daniel Arap Moi asked the affluent countries to end the reckless use of fossil fuels and accept the responsibility of helping poor countries get the energy they need to develop. Mrs Gandhi said that energy should become a focal point of contemporary international co-operation to facilitate joint development of new and renewable energy such as solar power, wind, water and bio-mass consumption.

According to a UN source, the meeting is being convened under a 1978 General Assembly resolution which stressed the plight of developing countries, most of which import oil. During 1980 Third World oil importers ran up a payments deficit of around 50 billion dollars. So, the world community has turned its attention to the energy crisis and to look for alternatives to fossil fuels ranging from hydro-electricity to cow dung.

As in other UN gatherings, the Third World countries are expected to seek infusion of capital and technical assistance. With the help of expert studies, the conference intends to examine all alternative energy sources and their possible use. While a general debate is in progress, two committees will try to work out a programme for international action.

Some of the alternative forms of energy are still being developed while others are to be discussed. Among the former are methods of harnessing the energy of the oceans, converting solar radiation into electric current, and extracting fuel from oil shale and tar sands. Historic sources that will be re-examined include wind power and the humble draft animal. Some two billion people in the developing countries still depend for their livelihood on mules, donkeys, bullocks, elephants and camels.

Animal manure, with other farm wastes such as wheat and rice straw, meanwhile can be fed into converters to yield methane gas and other biomass fuels. The conference will consider these, noting the drawback that, in some societies, the use of human or pig excrement is socially unacceptable.

Experts expect that the conference will pay special attention to the burning of wood, still used to cook the food and heat the homes of half the world's population. This has been called "the second energy crisis". More than 100 million people now live in areas where basic wood fuel is running out because of the rate at which forests have been cut down. One billion others can meet their energy needs only by using up their wood reserves faster than they can be regenerated.

The conference will examine hydropower, a renewable energy source that already generates some 23 per cent of the world's electricity, and the exploitation of geothermal energy generated by the flow of heat from earth's core. New and renewable energy sources at present contribute about 15 per cent of the world's total energy supply.

Energy forecasters argue that if developing countries are to achieve even modest economic goals, their energy requirements will rise threefold in the next 20 years, suggesting that new and renewable energy sources will be called upon to meet 25 per cent of expanded world demand by the end of the century.

Mr Enrique V. Iglesias, the Uruguayan economist, who is secretary-general of the UN Conference, says the Nairobi meeting represents a momentous step, because it is the first concerted global effort to plan a rational energy future for the world. He wrote recently: "If we can alert public opinion to the gravity of the energy problems of the developing countries (for example, the severity of the fuel-wood crisis) and thereby create a climate of political will for change, we will be moving in the right direction."

Kenya is the only African country which is participating in the *Energy* 81 exhibition on the premises of the Kenyatta International Conference Centre in Nairobi. Performing the opening ceremony of the exhibition as part of the UN Conference on new and renewable sources of energy, Kenya's Energy Minister, Mr John Okwanyo, observed the developing countries had found it difficult to cope with the situation arising out of escalating oil prices. He said the oil price hikes resulted from a realisation that oil was a finite resource which would be exhausted one day, adding that the decision to increase oil prices had had disastrous effects on the developing world.

The international community was shocked to realise that the era of cheap oil energy was over, and that time had come to look for alternative sources, he said. The exhibition offered a unique opportunity to learn about the most modern equipment and on the latest technological developments on new and renewable sources of energy. Inviting visitors to tour the Kenya stand, which he said, was the only stand by an African country, Mr Okwanyo added that the stand would display in expensive simple cooking stoves and other items.

The energy exhibition will last until August 31. It has been organised by the United Nations Secretariat and the Kenya Ministry of Energy. About 20 countries and agencies are taking part. India has reserved three stands for the display of her technological progress since independence.

The four Prime Ministers attending the conference are: Mrs Indira Gandhi of India, Mr Thorbjorn Falldin of Sweden, Mr Pierre Trudeau of Canada, and Mr Edward P. G. Seaga of Jamaica.

In honour of the visiting Prime Minister, the Indian High Commissioner. Mr V. K. Grover hosted a party at his residence in Nairobi on August 9. A large number of Indian nationals was present on the occasion.

According to Mr R M. Roy, press attache of the Indian High Commission, the international preparatory committee for the UN Conference on new and renewable sources of energy started its final meeting on August 3. The Group of 77 had separate prior discussions followed by the plenary of the whole committee. Working groups were set up by both the Group of 77 and the plenary to discuss different parts of the draft programme of action to be adopted by the conference. The Indian delegation to the preparatory committee was led by Mr Maheshwar Dayal, Secretary, Commission for Additional Sources of Energy and included Mr S. V. Purushottam, deputy permanent representative of India to the UN.

FICCI's export plan

NEW DELHI

THE Federation of Indian Chamber of Commerce and Industry (FICCI), has submitted an export plan for 1981-82 to the Government. It is problematical how far it would receive serious consideration. A meaningful government-business dialogue has failed to develop, which remains an obstacle to the formulation of proper policy. It is a measure of how little confidence the FICCI has that its plan would make any material difference to official thinking that it should have submitted it four months late. Last year also an export plan was submitted but, according to the FICCI itself, "many measures suggested remained unimplemented." The FICCI visualises exports of Rs 8,600 crores in 1981-82, which would mean an increase of nearly 23 per cent over the last year's figure of Rs 7,100 crores, whereas the Government has pegged the target at Rs 8,400 crores. But there is scepticism in government circles whether a target of even Rs 8,400 crores would be attained because of "adverse international conditions".

Widening of the trade gap from Rs 1,088 crores in 1978-79 to Rs 2,449 crores in 1979-80 to Rs 5,400 crores in 1980-81 makes the need to boost exports an automatic policy imperative. From the statistical picture given by the Commerce Minister at his recent press conference it would seem that exports have begun to pick up. In April-May this year export earnings were Rs 1,610 crores compared to Rs 837 crores in the corresponding period of last year, showing an increase of 20 per cent.

Perhaps the various measures taken by the Government are beginning to yield results. Nonetheless the overall position remains far from satisfactory. For one thing, a certain part of the improvement in export earnings is attributable to inflation and not quantitative growth. Nothing illustrates this better than the fact that India's share of world exports not only remains miniscule but has continued to decline, being 0.72 per cent in 1970 and 0.36 per cent in 1980. This brings us to the fundamental proposition that, in the ultimate analysis, the capacity to export depends on the capacity to produce. The truism has received due emphasis in the Tandon Committee report on export strategy and constitutes the base of the recommendations contained in the FICCI plan.

The FICCI's recommendations that measures should be taken to ensure availability of raw materials and essential inputs, improve infrastructural facilities, harmonise industrial relations and expand and modernise production capacity collectively are tantamount to an exhortation to give stimulus to production. To go a step further, it is possible to assert that to the extent the country continues to be saddled with economic policies that impede rapid economic growth the drive to boost exports can only succeed within pre-ordained limits.

The FICCI plan also, of course, contains recommendations having a direct bearing on exports. These include concessional railway freight rates for export goods, tax support in the form of a rebate on export earnings and an additional cash compensatory support for promotion of new products and exploration of new markets. Also stressed is the need to build a sound export infrastructure in the shape of proper port and shipping facilities and international air cargo terminals at important airports. This is unexceptionable. But recommendations seeking further financial concessions require careful examination.

As it is, the policy of subsidising exports is not entirely free from controversy. The ever increasing burden of exports subsidy and revelations of abuse have led to suggestions that there should be a cost-benefit analysis of the entire scheme. The Sixth Plan itself calls for pruning of subsidies, if not their elimination. A recent report of the Comptroller and Auditor-General cites several instances where the foreign exchange earning has been less than the expenditure on subsidisation. A minute of dissent attached to the Tandon Committee report has strongly questioned the effectiveness of the incentives scheme. Further, an element of *ad hocism* in decisions concerning concessions has detracted from the stability of export policy. However, if Indian exports have to increase in the face of stiff competition, there is no alternative to the scheme of subsidies, especially when several of our competitors provide a similar financial crutch to their exporters. What perhaps is needed is a review and rationalisation of the subsidies structure and better monitoring of the concessions given.

The FICCI export plan considers that the following items would be the major contributors to export growth in 1981-82: engineering goods including capital goods and project exports, gems and jewellery, garments, wool and woollen goods including carpets, chemical products including basic chemicals and pharmaceuticals, marine produts, oil cakes, sports goods and spices. Legislation to establish the *EXIM* bank to boost project exports is to be introduced in the monsoon session of Parliament. If the bank could act as a catalyst in inducing Indian construction companies to adopt the consortium approach, it will have gone a long way in enabling them to bag contracts in West Asia in the face of competition from western giants.

Bombay spot exchange rates of currencies as on 11-8-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.40(a)	9.60(a)
Austria	A Schilling	193.00	199.00
Belgium	B. Franc	453	462
Canada	C. $	13.19	13.65
Denmark	D. Kroner	87.20	88.50
France	Franc	66.30	67.50
Hong Kong	H.K. $	64.10	66.00
Italy	Lira	13,700	13,890
Japan	Yen	2530	2580
Malaysia	M. $	25.60	26.40
Netherlands	Guilder	30.60	31.10
Norway	N. Kroner	67.90	69.10
Singapore	S. $	23.40	24.10
Sweden	S. Kronor	58.20	59.30
Switzerland	S. Franc	23.50	24.00
UK	£	6.1060	6.1590
USA	$	10.82	10.02
West Germany	D.M.	27.50	28.00

As far as exports of our traditional foreign exchange earners like tea, cotton textiles and jute manufactures are concerned, the FICCI believes that these would rise only marginally owing to an unfavourable international market situation and emergence of new suppliers including China. However, for FICCI to suggest that this year fruits, vegetables and processed food products should be exported to the tune of Rs 1,000 crores is symptomatic of the one-sidedness the businessmen's organisation often betrays in its thinking.

The FICCI's pet demand for restructuring the tax system so as to minimise the cascading effect of various levies and introduction of the value added tax pattern finds, of course, a prominent place in the plan. The suggestion that a joint team of the Government and the FICCI should study the exports apparatus of South Korea and Taiwan can only do good provided one difference is kept in view. Those are tiny, export-based economies which continental India, with the vastness of her domestic demand, can never be. In fact, the FICCI has done well to remind the Government of the importance of import substitution by pointing out that Rs 2,000 crores should be saved in foreign exchange by acquiring self-sufficiency in items like cement, caustic soda, fertilisers, paper and edible oils. Alleviation of difficulties faced by exporters on account of a labyrinthine over-regulated system is a promise, which the Government must now translate from theory into practice. If India fails to surge forward on the export front, it would only be indicative of deficiency in the making of policy and its implementation.

US foundation for African Policy

By A SPECIAL CORRESPONDENT

IN assessing American interest in Africa south of the equator, it is good to remember that the United States has with South Africa less than one per cent of its total foreign trade. Of the total foreign investment, an overwhelming contribution has come from Britain. In fact, South Africa has so far been able to attract the insignificant outlay of less than one per cent of the total overseas investment of the United States. Also it currently imports nearly two-fifths of its oil requirements from Black Africa. There is, therefore, no question where America's economic ties and interests lie.

Nor has there been any doubt, since Mr Reagan's men came to power in Washington, of his political support for the minority white regime in South Africa. It may be a hasty and unwarranted conjecture to conclude that South Africa also has the blessings of Mr Reagan in its efforts to destabilise African governments, as in Angola. But its massive industrial growth in the past decade, a strong balance of external accounts thanks to the boom in gold prices (a thing of the past now), and a strategic position along the shores of Atlantic and Indian Oceans have gone a long way in commending South Africa as a worthwhile ally to the great powers. Obviously, its manifestly pro-West and anti-Communist orientation has attracted President Reagan.

A further temptation lies in American concern about access to the mineral wealth of South Africa-occupied Namibia. Latterly, the United States has blessed South Africa's desire to undermine the implementation of the UN Security Council resolution on Namibia's independence. In this it has not hesitated to give up the common ground reached after long negotiations by the Western Contact Group consisting not merely of Britain, France, West Germany and Canada, but also of the United States. Mr Reagan's second thoughts have thus put in jeopardy all the agreed steps in Namibia—disarming of guerrillas, establishment of demilitarized zones, return of Namibian refugees from Angola, withdrawal of *UNITA* forces armed by South Africa, and a free and fair poll under credible international auspices.

When in Angola last April the Assistant Secretary of State for African Affairs, Mr Chester Crocker, tried to substitute the Security Council resolution by what is now known as Mr Reagan's Linkage Plan, he pressed for withdrawal from Angola of Cuban troops who incidentally ensure the security of oilfields of direct and indirect interest to the United States. He wanted the Angolan Government to include representatives of the opposition *UNITA* Party. If Angola accepted these con-

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Aug. 7, 1981 over		
		Aug. 7, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.50	3.50	3.50	2.80	—	—	25.0
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.20	2.20	2.20	2.00	—	—	10.0
Bajra	Average	2.20	2.20	2.20	2.00	—	—	10.0
Gram dal	Average	6.30	6.30	6.20	5.95	—	1.6	5.9
Tur dal	Average	6.60	6.60	6.50	5.50	—	1.5	20.0
Potatoes	Average	2.40	2.40	2.40	2.60	—	—	—7.7
Onions	Average	1.60	1.60	2.00	1.00	—	—20.0	60.0
Milk per litre	Buffalo	6.00	6.00	5.00	4.30	—	20.0	39.5
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams)	—	1.55	1.55	1.55	1.25	—	—	24.0
Sugar	Average	7.00	6.90	6.70	8.00	1.4	4.5	—12.5
Gur	Average	6.60	6.60	6.00	6.00	—	10.0	10.0
Groundnut oil	Average	16.00	15.50	15.00	11.00	3.2	6.7	45.5
Vanaspati	Average	16.50	16.00	16.00	—	3.1	3.1	—
Toilet soap	—	1.95	1.95	1.90	1.90	—	2.6	2.6
Exercise book (200 pages)	—	2.50	2.50	2.50	—	—	—	—

ditions, the US would establish diplomatic relations with Angola. It was indeed a pity the irony was lost on Mr Crocker of communist and Cuban troops guarding Gulf oils Angolan operations!

Angola rejects this move to link Namibian independence with South African presence and armed incursions. Resenting interference in its internal affairs, the Angolan Government told Mr Crocker that there were no foreign troops on its soil when it became independent. They were invited only after some 6,000 South African troops entered Angola six years ago to stem the nationalist tide. Also the United States—"which has its troops in every continent in the world"—has no moral right to make such a demand. Angola has also been naturally concerned over the possible repeal of the 1976 Clark Amendment which would leave the American Administration free to give covert military support to the anti-government forces in Angola.

That Reagan's Linkage Plan does not find favour with all American allies has been known for some time. There is now enough proof that within the United States too the South African policy is opposed in many quarters. One of the weightiest pronouncements of a new policy on South Africa comes from the University of California press. It has just published the *Report of the Study Commission on US Policy Towards South Africa*. What gives significance to the report is not just the fact that the Commission was headed by the president of the Ford Foundation, Mr Franklin A. Thomas. Its strength lies in its utter reasonableness.

The report points out how US contacts and involvements in Africa must add up over time to a credible policy. Towards the evolution of this policy frame, the Commission lays down clear guidelines. The long-term emphasis of American policy has to be, according to the Commission, developing the industrial and mineral resources of *all countries* in the southern half of Africa. This will release the United States of dependence for import of strategic materials from South Africa and Namibia. In the short run, the report adds, the essential minerals should be stockpiled. At the same time American firms in South Africa should "not expand". Others contemplating investment in South Africa should "stay out" for the present. The American firms operating in South Africa have been asked to encourage Black leadership and work for labour welfare. By improving wages and living conditions and by adopting power-sharing procedures, they should help the emergence of responsible trade unions.

At the more political level the report is both bold and innovative. In relations with South Africa it suggests resort to pressures and influences directed towards liberalisation. The long-term aim for American policy should be to enable the Africans and coloured populations to share political power with the White minority. The report comes out emphatically in support of organisations outside South Africa which work for a change in its apartheid policy. It suggests concrete help to Black leaders and to other agencies—the World Council of Churches, for instance—which seek to restore human rights and dignity to the Africans. Most important of all is the suggestion that the American Government and people must openly declare how opposed they are to apartheid.

The Ford Foundation report could not have come at a more opportune moment. Its power lies in the power of ideas. The Reagan Administration may not yet withdraw aid and comfort from the South African Government. But the report must give heart not merely to the anti-apartheid forces in South Africa but also to the front-line African nations and to liberal opinion the world over.

In getting this report prepared the Ford Foundation seems to stand out on the side of the angels, but with its feet on the ground and not floating off into the clouds. It gives an agenda for concerted action step by step, without ignoring the inter-relationships with wider issues. In seeking to find answers to pressing difficulties of today, it does not forget the historical context of yesterday.

Steel modernisation programme

From P. C. MAHANTI

CALCUTTA

IN the course of a recent visit to Calcutta, the chairman of the Steel Authority of India, Mr K. C. Khanna, made a heartwarming statement on his organisation's plan for investment in the steel sector in West Bengal. If the plans go through then some Rs 1,100 crores to Rs 1,200 crores would be invested in the three major public sector steel undertakings, namely Durgapur Steel Plant, the Alloy Steels Plant at Durgapur, and the Indian Iron and Steel Company, in the course of the next four to five years.

The lion's share of the proposed investment will go to Durgapur plant for which the British Steel Corporation has prepared a modernisation report. The plant badly needs for it is over 20 years old now but the Steel Authority Board feels that there should be some tonnage expansion along with the modernisation of the existing equipment also to enhance the plant's ability and to make more steel available to the economy at a cheaper capital cost. This is a sound proposition which ought to appeal to the Government of India, the Ministry of Steel precisely, and the Public Investment Board which will have to clear the investment needed for the plan.

The project to expand the capacity at the Alloy Steel Plant from the present 60,000-tonne capacity to one of 90,000 tonnes per year has already been cleared by the Public Investment Board. So work on this expansion project is likely to start soon. In terms of size and investment, Rs 60 crores may not look big but it will lead to a more diversified product-mix which should increase its profitability and, at the same time, make available to the economy types of special steel that are often in short supply and have, therefore, to be imported. Incidentally there is a possibility that the present executive managing director of Durgapur Steel, Mr N. K. Mitra, goes over to Bhilai to take charge from E. R. C. Sekhar, who is going away to Nigeria on a lucrative assignment on that country's steel project. Incidentally Mr Sekhar's migration represents another page of brain drain which has been taking place in the steel industry. First of all it was P. L. Agarwal, a SAIL chairman, to Indonesia, then K. C. Mohan of MECON to West Asia followed by many others not so well-known.

The third major steel project chosen by the Steel Authority of India for substantial new investment is the Indian Iron and Steel Company, the country's second oldest plant and the oldest in West Bengal. Once the pride of Bengali entrepreneurship it is now a state-owned undertaking but still a sick one. As per plans already approved a sintering plant and ancillaries, at a total cost of Rs 60 crores, will be set up during the next three to four years to improve the operational efficiency of the plant. But the SAIL chairman feels that the time has come to consider whether this plant too should not be expanded to a modern, more economic capacity of two million tonnes. Accordingly, he has invited Gipromez of Russia to send a team of experts to study the present conditions of the plant and make recommendations about the lines on which the plant can be expanded and diversified. The French once showed interest but the interest was not so serious and unlike Gipromez there would have been no financial backing from the French side.

Tata Steel's modernisation programme has started in right earnest. This Rs 200-crore time-bound programme is meant to modernise the company's steel melting equipment and a part of the rolling equipment as well through the continuous casting process. Some 200,000 tonnes of extra steel capacity will result from the programme which is to be completed in nearly 30 months' time. A second phase of the modernisation programme will take place in the rolling mills and there will be a further measure of diversification of the product-mix.

Big potential for nucleonic gauges

BOMBAY

INDIA today has a comprehensive programme of radioisotope applications and occupies a leading position in the world. A close interaction between R & D centres, the electronics industry and users is essential for catching up with the advanced countries in the field of nuclear instrumentation technology, according to Dr V. K. Iya, director, Isotope Group, Bhabha Atomic Research Centre (BARC).

Delivering the presidential address at a seminar on nucleonic weigh feeders organised by ACC-ECIL here, he said BARC had played a pivotal role in the growth of isotope radiography by providing the equipment and radiation sources necessary for this work along with a comprehensive training programme in radiogaphy techniques. The country which had two radiography cameras in 1957, now had 1,000 cameras. Most modern Indian industries—all the major fertiliser factories, oil refineries, thermal and nuclear power stations, electrical and heavy machinery industries and defence establishments today used isotope radiography techniques. These have brought spectacular savings to user industries.

Radioisotope techniques offer high sensitivity, and selectivity in detection and are suited for studying leaks in buried pipelines and system kinetics in process industries. For instance, tracer techniques used in sediment transport in almost all the major ports of the Indian coastline have contributed to substantial savings in our capital dredging programmes and in harbour and port designs. A recent application of tracer techniques has been in establishing leaks in the buried crude oil pipe line between Koyali and Viramgam. Radioisotope tracers are also now in regular use in the blast furnaces of our steel industry to indicate the wear of refractory linings, plan relining operations in advance and prevent unscheduled shut-down of these furnaces.

Perhaps the most important economic benefit of the application of radioisotope techniques is in the area of nucleonic gauging for process control. Nucleonic gauges can be used for determination and control of the level, thickness, density, concentration and other parameters of materials in industrial processes. There are about 1,000 nucleonic gauges installed in the country today, but most of these are simple level control devices. The potential for application of this technology is enormous.

Mr S. R. Vijaykar, managing director, ECIL, said, industries in India should employ sophisticated systems of electronics to improve output, raise quality and bring down production costs. Mr Vijaykar, who inaugurated the seminar, said we had the scientific and technical wherewithal to ensure safety in the use of nucleonic devices.

Mr T. V. Balan, ACC's director, in his introductory observations, spoke of the satisfactory working of nucleonic weigh feeders which are in extensive use in ACC factories, and other leading plants in the country.

UTTAR PRADESH

Low level of investment in industry

LUCKNOW

LACK of adequate infrastructure facilities, shortage of power and delayed supply of critical raw materials have impeded the industrial growth of Uttar Pradesh. The main reasons for the industrial backwardness of the State have been the low level of investment in the Central and State sectors and inadequate incentives for attracting investment from other States.

Broadly, under-utilisation of installed capacity may be attributed to demand constraint, supply constraint and sickness of units. Capacity utilisation of selected industries under large and medium sector (on the basis of DGTD-MLS) is indicated in Table 1.

Table I : Capacity utilisation of selected industries:

Industries	% capacity utilisation in 1979	
	UP	India
I	2	3
Aluminium	82.0	69.3
Nitrogeneous fertilizer	68.9	69.2
Leather footwear ..	22.9	55.3
Cement	54.2	81.2
Pesticides	102.0	90.6
Soap	197.1	134.5
Baby food	69.6	91.0
Bycycles	59.3	105.3
Dry cells	18.5	66.5
Paper and paper board	68.3	76.1

Village and small industries, which play a significant role in providing more employment, suffer from different bottlenecks/difficulties which are now being sought to be removed. Lack of entrepreneurship and inadequate infrastructure are the major constraints for the growth and development of small scale industries.

In 1972-73 there were only 12,851 small scale units. By 1979-80, their number rose to 43,159. Besides this, the number of small scale units registered under the Factories Act also rose to 4,284 in 1978 from 3,431 in 1970. Authentic data on small scale industries in the unorganised sector are not readily available. This has been the major constraint in the projection of growth of small scale industries. However, it is estimated that the number of such units was 3,107 in

1960-61, which has now increased to 44,443, providing employment to 5,38,000 people in the State and producing goods worth about Rs 980 crores a year.

The development of small scale industries in this most populous State of the country has been slower than in some other State. According to a study made by the Awadh Chamber of Commerce, about 40 per cent of small scale units are sick. There has been a complaint from small industry that canalising agencies like STC, MMTC, SAIL, TEEDC, UPSIC, etc at times do not supply material in a phased manner but are asking the units whose financial resources are limited to lift the material in a single lot.

Briefly, the problems being faced by the small units in getting raw materials from the canalising agencies are : late delivery of material, non-supply of material of required specifications, underweight in different godowns of canalising agencies, creation of cartels of foreign suppliers, wide gap between the prices of indigenously available raw materials and imported by canalising agencies, difficulties of small units due to lack of sales depots/sales agencies of the canalising agencies in the State etc.

Small scale units have been facing acute shortages of raw materials like iron and steel, pig iron, cement, chemicals, mutton tallow, wool, hide and skin, oxygen, furnace oil, dyestuffs etc. According to the spokesman of the Awadh Chamber of Commerce, the main reason for the non-availability of the raw material is that the distribution system from the Centre to the State does not conform to any uniformly applied formula.

The Chamber's study has revealed that although the import of raw material has been increased, the small units have not been getting a share in the foreign exchange as per its contribution in exports. Further, the small sector receives its allocation on value basis and not on quantity basis as a result of which the quantity of raw material available to a unit has been reduced considerably.

No firm figure about the closure of small units due to non-availability of raw material and frequent power cuts are available, but the Chamber's assessment of the situation is that at least 20 per cent of the existing units are on the verge of closure.

Though the State has now started contributing about 20 per cent of the country's total production of khadi and village industries, the Commission's activities in hill, border, tribal and weaker section areas, which are more or less carried out departmentally, have been on a low scale, particularly from the viewpoint of enlarging employment in these areas.

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	July 18 1981	July 11 1981	June 20 1981	July 19 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	273.8	274.0	275.3	264.5	—0.1	—0.5	3.5	31.0
Primary articles	269.4	268.7	259.0	236 0	0.3	4.0	14.2	30.8
Fuel, power, lubricants etc.	427.4	425.0	400.5	353.3	0.6	6.7	21.0	57.9
All commodities	285.0	284.6	279.1	260.1	0.1	2.1	9.6	33.8

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	July 24 1981	July 17 1981	June 26 1981	July 25 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,077	58,309	57,780	49,130	—0.4	0.5	18.2	35.9
Bank credit	26,778	26,733	26,294	22,095	0.2	1.8	21.2	37.3
Aggregate deposits ..	40,578	40,543	39,927	33,546	0.1	1.6	21.0	41.4
Foreign exchange reserves(a)	4,877	4,877	4,877	5,156	—	—	—5.4	—14.2

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	June 1981	145 9	145.5	0.3	5.7
Exports	Rs. crores	May 1981	383	627	—38.2	—15.7
Imports	Rs crores	May 1981	559	972	—42.5	22.1
Trade balance	Rs crores	May 1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	June 1981	4,877	5,045	—3.3	—6.9
Wholesale price Index ..	1970-71=100	June 1981	278.3	276.6	0.6	14.8
Consumer price Index for Industrial workers ..	1960=100	May 1981	433	427	1.4	13.6
Unemployment(d) (lakhs)		Feb 1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3	15.2
Imports	Rs crores	12,210	8,908	2,955	37	27.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)..*	Rs crores	55,229	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.6	217.1	139.7	17.8	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)** (lakhs) ..		162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(...) = Not available

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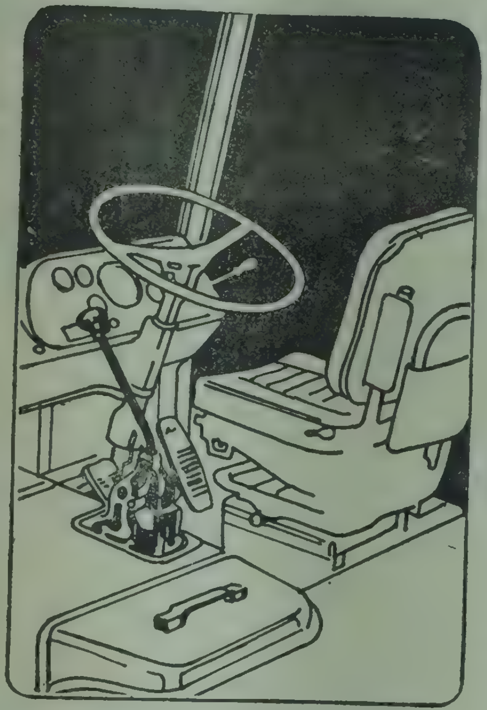

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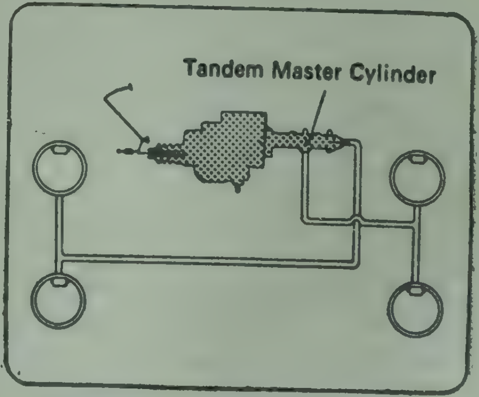

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CHAITRA-T-932

Need for metals buffer stock

BOMBAY

INDIA needs to maintain a buffer stock of basic non-ferrous metals because the gap between indigenous demand and supply is large and it has to import most of its requirements. Mr Surendra N. Parikh, president of the Bombay Metal Exchange Limited, asked therefore Mr Daya Dhaon, chairman of MMTC, to form a metal bank in the country to ensure steady supplies of metals. He was speaking at the silver jubilee function of the Bombay Metal Exchange. He said, the responsibility for saving precious foreign exchange lay with Hindustan Copper Limited and Hindustan Zinc Limited, which should meet their targeted plans.

Today, Hindustan Zinc Limited meets 45 per cent of the country's demand for zinc metal and 25 per cent of demand for lead metal. By 1989-90 it will meet almost 90 per cent of the country's demand for zinc and 75-80 per cent of its demand for primary lead.

Describing production and consumption trends of zinc and lead in India, Mr R. P. Kapur, chairman of Hindustan Zinc Limited said, zinc demand which was 68,000 tonnes in 1970-71 and 106,000 tonnes in 1979-80 would reach 185,000 tonnes in 1989-90. On the production side, installed capacity had increased from 30-35,000 tonnes in 1970 to 90,000 tonnes in 1980. To meet increased demand, HZL was bringing another smelter into production in western India with a capacity of 100,000 tonnes per annum.

Primary lead consumption in India increased from 18,000 tonnes in 1970-71 to 41,000 tonnes in 1979-80 and would reach 75,000 tonnes per annum by 1989-90. Production of primary lead in India had increased from 3,500 tonnes per annum in 1970-71 to 15,000 tonnes per annum in 1980-81 and would reach 27,000 tonnes per annum by 1984-85.

While Mr Kapur was optimistic that India would achieve self-sufficiency in zinc concentrates and metal production in the next six to seven years, Mr O. P. Vasudeva, chairman and managing director of Hindustan Copper Limited, did not feel that self-reliance in copper was possible in the near future. India has known copper reserves of 415 million tonnes with a copper content of 1 per cent. If we start exploiting these reserves today, our deposits will last for 50 years. If we try to meet increased demand from the reserves, we will exhaust the deposits in 25 years, Mr Vasudeva said.

Mr Kapur also described international trends in zinc and lead production and consumption. The per capita zinc consumption of industrialised countries like the US, Japan, West Germany and the UK at present was 5.9 kg, 5.2 kg, 5.8 kg and 5.0 kg, respectively. In contrast India's consumption was a mere 0.15 kg.

Zinc smelting capacities which grew near consumption centres in industrialised countries like the US, Western Europe and Japan are now shifting to less industrialised countries which produce concentrate such as Peru, Mexico, Australia, Canada, India and Brazil.

The prices of non-ferrous metals, mainly zinc, copper and aluminium, have been uneconomic for the past decade. Lead has fared better. Price trends in non-ferrous metals have been influenced by the distortions caused to the world economy by the 1973 oil crisis. Further distortions in prices have resulted from the differing strength of currencies in Europe and Japan, which are major producing and consuming areas.

Chemicals: Indiscriminate import policy

CALCUTTA

JUDGING from the presidential speech of Mr B. V. Nagori at the recent meeting of the Indian Chemical Merchants and Manufacturers Association, the chemical industry in the country presents a mixed picture. In some areas, it is quite depressed, in some, rather bright. For example,, the production of caustic soda, potassium chlorate and red phosphorus was higher in 1980-81 than in the previous year. On the other hand, the output of calcium carbide, carbon black, soda ash, technical pesticides and nitrogenous fertilisers was lower than in the previous year. The capacity utilisation in the industry as a whole was 50 per cent which means that the capacity utilisation in the depressed sectors was particularly low.

While the sluggish condition of the economy has been the main cause of the chemical industry's cheerless picture, the government's indiscriminate import policy also has a lot to do with the chemical manufacturers' current difficulties. The dyestuffs industry is a case in point. The government's policy to license dyestuffs imports liberally has been badly hurting the indigenous producers. The much-needed growth of the industry, especially in the eastern region, has also been checked. Yet another of example of how thoughtless taxation policy by raw material producing states can damage the interests of an important segment of the chemical industry is provided by the UP Government which has enhanced excise pass fee on alcohol by as much as 400 per cent. This is definitely adding to production costs in an industry that is already beset by serious financial problems. Apart from the high rate of excise duty, there is a great shortage of this raw material in West Bengal leading to the shut-down of the Alkali and Chemical Corporation's Rishra low density polythylene plant.

Mr Nagori's speech also contained references to the chemical industry's poor growth in the eastern region. To West Bengal's problems in diversifying its economy, his references were elaborate. Much is expected from the proposed Haldia petrochemical complex and the downstream units that would follow in normal course, but the complex is still far from materialising. At least, 100 projects downstream in medium, small and large sectors could materialise which would not only generate considerable employment but also give a significant boost to the economy of West Bengal and the eastern region as a whole. For this the Centre is being consistently blamed by the State Government, but the Ministry itself is responsible for causing a major upset in the state's small-scale drugs and pharmaceutical industry. The State Government apparently wants to cut down drastically purchases from these units for the Employees' State Insurance Scheme. These units with an annual turnover of Rs 15 crores and a labour force of about 3,000, are dependent on government purchases of the extent of 80 per cent of their output.

However, the chemical industry in the State is happy that the West Bengal Government in its 1981-82 budget recognises chemicals as a growth-oriented industry and to help it along further, the budget has reduced the entry tax on chemicals NES from 2 per cent to 1 per cent. The entry tax on denatured spirit, methylated spirit and alcohol used by the industries has been abolished while some relief has been given to pharmaceuticals.

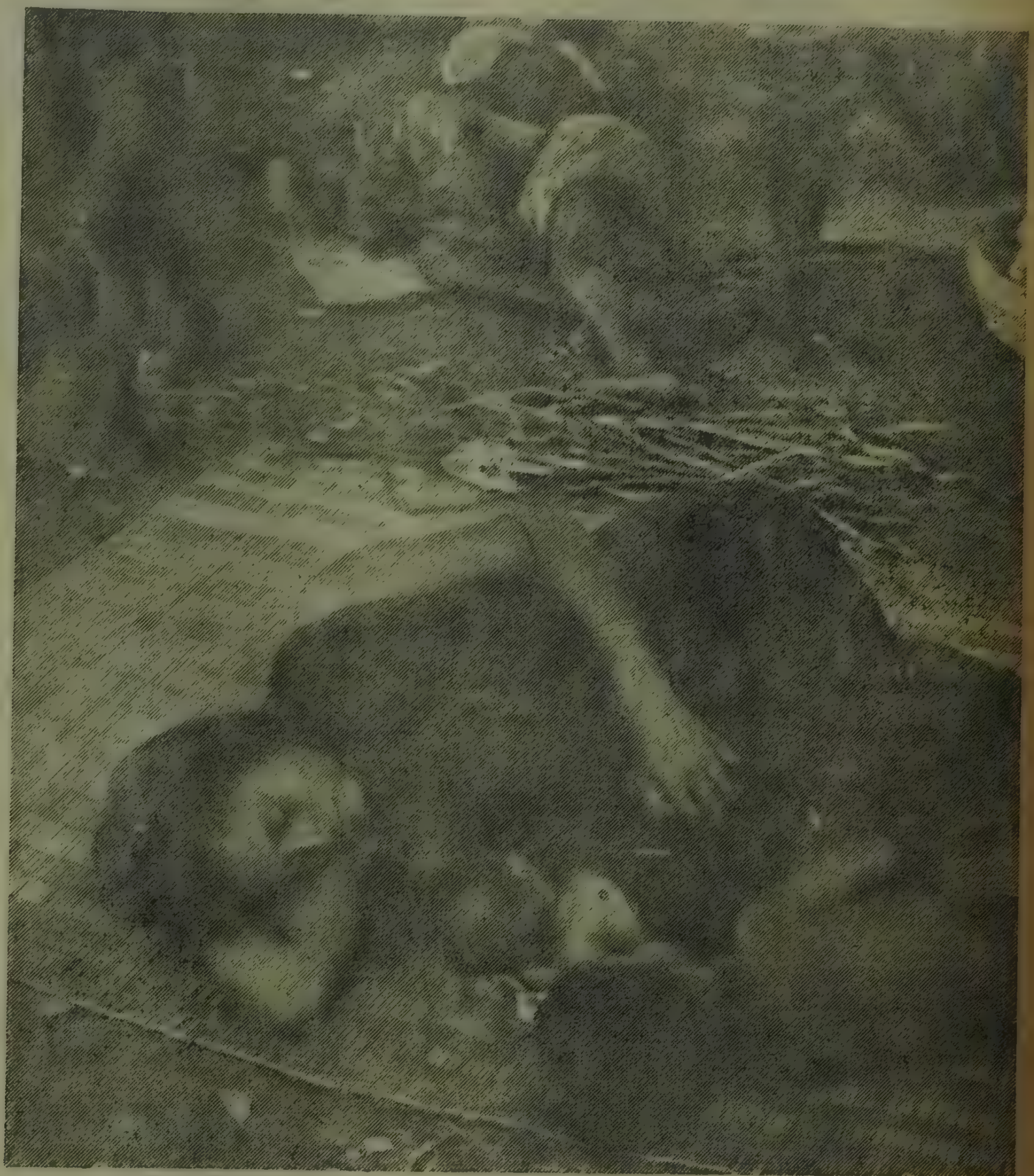
COMMERCE

Vol. 143 No. 3661 Bombay, August 15, 1981

INDEPENDENCE DAY 1981

LEVELS OF LIVING IN STATES

—*A SURVEY*



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34

YEARS OF INDEPENDENCE

THE FRUITS AND THE FUTURE

☐ we have built the foundation of a modern self-reliant economy.

☐ we have achieved self-sufficiency in food, diversified our industrial structure and made significant progress in science and technology.

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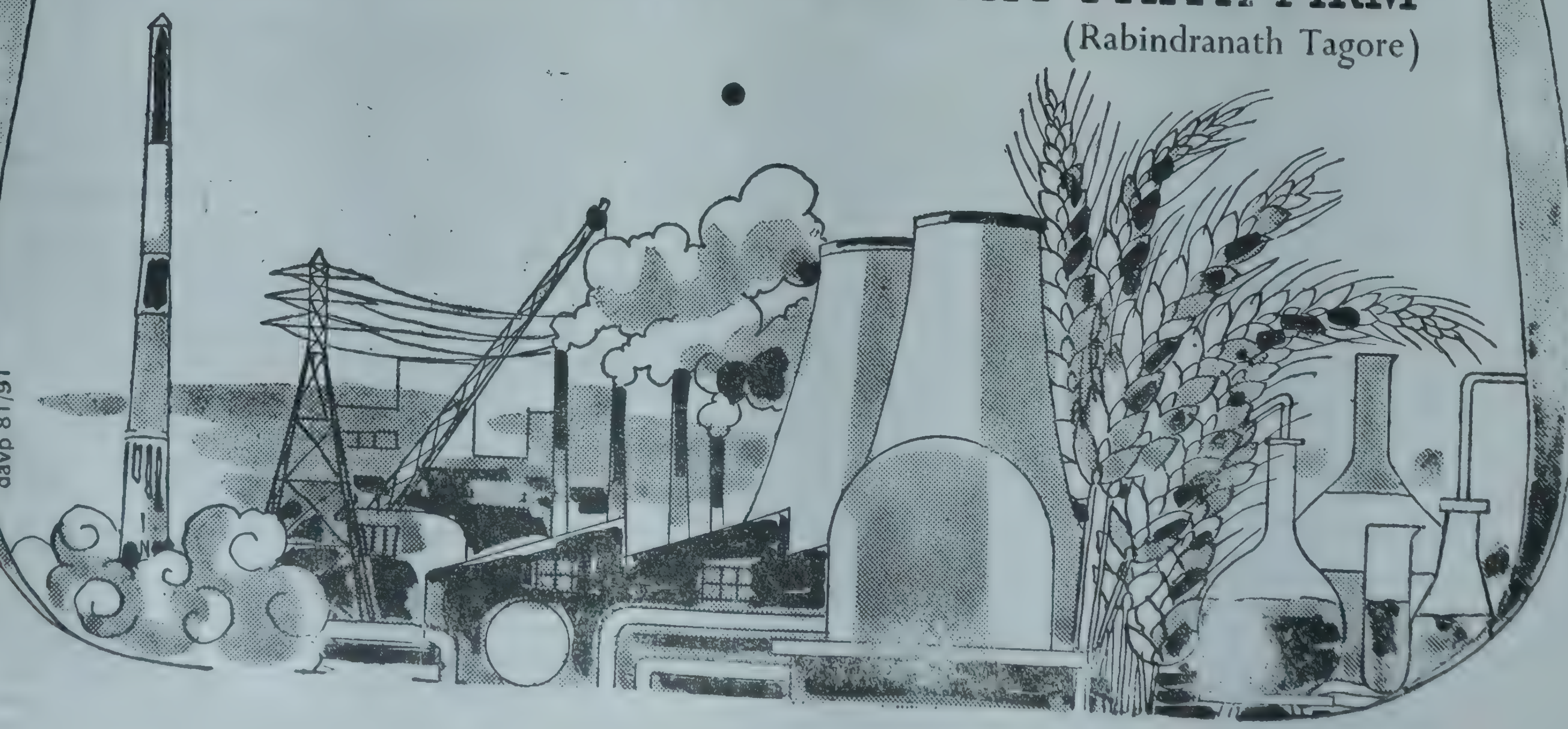
we aim at lifting one-sixth more of the people
above the poverty line and provide safe drinking water
to all the problem villages.
And by 2000
eradicate leprosy and reduce birth rate from 36
to 21 per thousand.

'THE DAY WILL DAWN, HOLD THY FAITH FIRM'

(Rabindranath Tagore)



Levels of living: Widespread poverty and illiteracy

By COMMERCE RESEARCH BUREAU

THE economic development during the last three decades has enabled a perceptible increase in the average per capita income at 1970-71 prices from Rs 466 in 1950-51 to Rs 678 in 1979-80 (Table 1). This increase has not made any appreciable impact on the low level of economic existence of the people and the incidence of poverty in the country is still very high leading to a low level of standard of living.

Standard of living is a very broad concept. Various factors go into the constitution of the standard of living of the people. One of the most important factors is the consumption standards. Poverty and undernourishment constitute a very widespread problem in the present day world. It is found that large sections of people live below any acceptable minimum standard of living especially in the developing countries. The improvement in the standard of living of the people depends mainly on two factors (i) creation of assets — *i.e.* socially owned assets like roads, irrigation works etc and assets predominantly owned or controlled by individuals and (ii) levelling of incomes. Despite high economic growth rates in many countries the additions to income have been unevenly distributed and have failed to bring about appreciable improvement in living standards of the population in the lower income groups.

The symptoms of poverty or the signs indicating the lack of access to basic needs are malnutrition, illiteracy, slums, inaccessibility to public facilities, overcrowding, high infant mortality rate etc.

Rural structure and illiteracy

India continues to be predominantly rural although its rate of urbanisation has shown marked increase over the years from 10.4 per cent in 1911 to 23.7 per cent in 1981. In other words, despite showing a decline in the percentage of rural population, 76.3 per cent of its population today live in rural areas. Similarly, with all the Plan efforts over the years to increase the number of literates in the country, as many as about 45 crore people today are considered illiterate. This is despite the fact that the literacy percentage has gone up from 5.9 in 1911 to 36,2 in 1981. This is mainly because of the phenomenal growth of population — 25.21 crores in 1911 to 68.38 crores in 1981. The data on urban population and literacy for the past four decades is shown in Table 2.

Fall in real income

In India more than three-fourths of its population live in rural areas. Agriculture and allied activities form the mainstay of more than 70 per cent of its working population contributing over 36 per cent of the national income (at current prices). Yet the income these activities provide to agricultural workers is substantially below average and almost at the subsistence level because of a number of factors.

According to the Rural Labour Enquiry 1974-75, the daily average wages of agricultural labour households were Rs 1.43 for men in 1964-65 while they were Rs 3.24 in 1974-75 — a rise of 127 per cent. However, in real terms (after deflating by the consumer price index number for agricultural workers) they were only Rs 1.26 — lower by 12 per cent than the 1964-65 wage. The daily average wages for women were Rs 2.27 in 1974-75 (money terms) as against Rs 0.95 in 1964-65.

On the basis of the data on value added per worker in 1970-71, it would be seen that although agriculture employed the largest number of workers in the country — 12.76 crore workers out of 17.83 crore workers — the value added per worker in agriculture was one of the lowest. At the same time the value added per worker in urban areas was invariably higher than that in the rural areas (Table 3).

Poverty line

The concept of poverty is difficult to define and includes not merely the

Table 1 : Per capita income in India
(At 1970-71 prices)

Year	Per capita income (Rupees)	Year	Per capita income (Rupees)
1950-51	466	1971-72	627
1955-56	508	1974-75	616
1960-61	559	1975-76	662
1965-66	559	1976-77	658
1966 67	552	1977 78	701
1967 68	587	1978 79	730
1968 69	589	1979 80	678
Compound annual rate of growth between 1950-51 and 1979-80 (Per cent)	1.3		

SOURCE : Government of India, Ministry of Planning, Central Statistical Organisation, **National Accounts Statistics** (various issues)

Table 2 : Growth of urbanisation and literacy

(Percentages)

Period	Population			
	Urban	Rural	Literate	Illiterate
1951	17.6	82.4	16.7	83.3
1961	18.3	81.7	24.0	76.0
1971	20.2	79.8	29.5	70.5
1981	23.7	76.3	36.2	63.8

SOURCE : Registrar General and Census Commissioner for India, **Census of India 1981. Series I India, Paper I of 1981, Provisional Population Totals**

Table 3: Value added per worker in rural and urban areas: 1970-71
(At current prices)

Industry	Net domestic product per worker (Rs)		
	Rural	Urban	Total
1. Agriculture	1,281	1,324	1,282
2. Forestry and logging	26,897	27,759	26,997
3. Fishing	3,908	4,032	3,937
4. Mining and quarrying	3,300	4,103	3,577
5. Manufacturing			
(a) Registered	5,299	5,833	5,697
(b) Unregistered			
(i) Household	490	1,145	696
(ii) Non-household	1,169	3,085	2,382
6. Construction	6,253	9,046	7,583
7. Electricity, gas and water supply	6,165	6,201	6,190
8. Transport, storage and communication	2,957	3,921	3,654
(a) Railways	4,220	4,615	4,504
(b) Transport other means and storage	1,951	3,478	3,087
(c) Communication	4,643	5,054	4,887
9. Trade, hotels and restaurants	2,069	5,737	4 339
10. Banking and insurance	11,171	12,150	11,959
11. Real estate and business services	1,400	3,730	3,333
12. Public administration and defence	3,183	3,492	3,354
13. Other services	1,164	2,079	1,602
Overall	1,443	3,930	1,884

SOURCE: Government of India, Ministry of Planning, Central Statistical Organisation, **National Accounts Statistics, 190-71 to 1978-79**, January 1981.

destitutes and the unemployed but also those whose earnings are below what may be regarded as the minimum acceptable standards.

In India poverty level is decided by the official agencies on the basis of a stipulated level of per capita consumption expenditure linked to per capita calorie requirement. People with consumption below this level would be considered as below the poverty line. In the absence of data on income distribution, the data on consumer expenditure collected by the National Sample Survey Organisation (NSSO) in its various rounds can be used to study consumption expenditure in the context of measuring poverty.

Those with per capita monthly consumption expenditure of Rs 76 or less (at 1979-80 prices) corresponding to a minimum daily calorie requirement of 2,400 per person in rural areas and the per capita per month consumption expenditure of Rs 88 or less corresponding to calorie requirement of 2,100 per person in urban areas are regarded as people below poverty line. The statewise data on population below the poverty line are given in Table 4.

It will be seen from the table that as many as 30.46 crore people or 48 per cent were living below the poverty line in India in 1977-78. Of these, 25.28 crore people were in rural areas and 5.18 crore people in urban areas. There was wide disparity in the percentage of population below the poverty line in different States. The percentage was the highest (66 per cent) in Orissa and the lowest (15 per cent) in Punjab.

On the basis of the household consumer expenditure in India in 1977-78, it would be seen that the poorest 30 per cent of the rural population accounted for only 15 per cent of the expenditure in rural areas while the rich or the top 30 per cent of the rural population accounted for as much as 52 per cent of the expenditure. Similarly, in urban areas the poorest 30 per cent of the population accounted for 13.6 per cent of the expenditure and the top 30 per cent population for 54 per cent of the expenditure (Table 5).

As regards the pattern of consumer expenditure it can be said that poorest people spend more on food items and less on non-food items. For people with highest consumption expenditure it is *vice-versa*. As people get higher incomes they eat better and spend proportionately less on food. The richest households spend a higher proportion of their total budget on housing, fuel, light and water than the poorest do on all non-food items. Not only is food the main element in poor people's budgets but preparing takes up a lot of their time. The per capita monthly expenditure on food and non-food items in rural and urban areas according to various survey rounds of the National Sample Survey (NSS) Organisation is shown in Table 6, while the distribution of per capita monthly expenditure on different items of consumption according to various expenditure classes in rural and urban areas for 1968-69 is presented in Table 7.

Table 4: Statewise population below the poverty line: 1977-78

State/Union Territories	Rural		Urban		Combined	
	Number (Lakhs)	Percentage	Number (Lakhs)	Percentage	Number (Lakhs)	Percentage
States						
Andhra Pradesh	170.35	43.89	36.44	35.68	206.79	42.18
Assam	88.34	52.65	7.07	37.37	95.41	51.10
Bihar	338.44	58.91	32.94	46.07	371.38	57.49
Gujarat	94.84	43.20	26.48	29.02	121.32	39.04
Haryana	22.10	23.25	6.95	31.74	29.05	24.84
Himachal Pradesh	10.37	28.12	0.51	16.56	10.88	27.23
Jammu & Kashmir	14.57	32.75	4.35	39.33	18.92	34.06
Karnataka	124.10	49.88	38.62	43.97	162.72	48.34
Kerala	93.42	46.00	22.19	51.44	115.61	46.95
Madhya Pradesh	244.59	59.82	42.74	48.09	287.33	57.73
Maharashtra	214.11	55.85	61.30	31.62	275.41	47.71
Manipur	3.42	30.54	0.56	25.48	3.98	29.71
Meghalaya	5.51	53.87	0.36	18.16	5.87	48.03
Nagaland	...	...	0.03	4.11	...	...
Orissa	158.97	68.97	10.33	42.19	169.30	66.40
Punjab	13.49	11.87	9.59	24.66	23.08	15.13
Rajasthan	85.79	33.75	19.12	33.80	104.91	33.76
Tamil Nadu	170.47	55.68	66.59	44.79	237.06	52.12
Tripura	10.93	64.28	0.61	26.34	11.54	59.73
Uttar Pradesh	429.93	50.23	72.27	49.24	502.20	59.09
West Bengal	227.65	38.94	48.10	34.71	275.75	52.54
Union Territories	6.35	34.32	11.24	17.96	17.59	21.69
All-India (weighted)	2.527.74	50.82	518.39	38.19	3.046.10	48.13

(...) = Not available

Notes: 1. Results are based on provisional and quick tabulation of the NSS on household consumer expenditure of 32nd round (July 1977 to June 1978).

2. The difference between the aggregate all-India private consumption expenditure estimated by the Central Statistical Organisation in the National Accounts Statistics and that derived from the NSSO data has been prorata adjusted among the different States and Union Territories in the absence of any information to allocate this difference among the States and Union Territories.

3. The number of people below poverty line relates to the population as on March 1, 1978.

4. For all-India the number and percentage of people below poverty line correspond to the population of the States included in the table.

5. Figures in this table and despatches from State correspondent do not necessarily tally because of the differing years of reference and differing sources of information.

SOURCE: Reply to Part (a) of the **Lok Sabha Unstarred Question No. 3220** on December 10, 1980.

Table 5: Distribution of household consumer expenditure in India

(Percentages)

Decile group category	Year					
	1958-59	1961-62	1965-66	1970-71	1972-73	1977-78
I. Rural						
(i) Bottom 30 per cent	13.1	14.7	15.1	15.4	15.4	15.0
(ii) Middle 40 per cent	34.3	33.2	34.3	35.1	33.7	33.1
(iii) Top 30 per cent	52.6	52.1	50.6	49.5	50.9	51.9
II. Urban						
(i) Bottom 30 per cent	13.2	12.9	13.6	13.7	13.8	13.6
(ii) Middle 40 per cent	31.7	31.4	31.9	31.8	31.9	32.4
(iii) Top 30 per cent	55.1	55.7	54.5	54.5	54.3	54.0

SOURCE: Government of India, Planning Commission, **Sixth Five Year Plan (1980-85).**

Table 6: Per capita monthly expenditure in India

NSS round (Period of survey)	Per capita monthly expenditure (Rs)			Expenditure on food as per cent of total expenditure
	Food	Non-food	Total	
Rural Areas				
25th (July 1970-June 1971)	25.98	9.33	35.31	73.6
27th (Oct. 1972-Sept. 1973)	32.16	12.01	44.17	72.8
28th (Oct. 1973-Sept. 1974)	39.70	13.31	53.01	74.9
Urban Areas				
25th (July 1970-June 1971)	34.04	18.81	52.85	64.4
27th (Oct. 1972-Sept. 1973)	40.84	22.49	63.33	64.5
28th (Oct. 1973-Sept. 1974)	47.93	22.84	70.77	67.7

SOURCE: Government of India, Ministry of Planning, **Sarvekshana, Vol. II, No. 3, January 1979,** Journal of the National Sample Survey Organisation.

Table 7: Per capita monthly consumption expenditure by expenditure classes: 1968-69

Monthly per capita expenditure class (Rs)	Rural			Urban		
	Food	Non-food	Total	Food	Non-food	Total
0 — 8	4.76 (79.6)	1.22 (20.4)	5.98 (100.0)	3.39 (62.2)	2.06 (37.8)	5.45 (100.0)
8 — 11	8.03 (83.0)	1.64 (17.0)	9.67 (100.0)	7.06 (73.6)	2.53 (26.4)	9.59 (100.0)
11 — 13	9.91 (82.1)	2.16 (17.9)	12.07 (100.0)	9.65 (79.3)	2.52 (20.7)	12.17 (100.0)
13 — 15	11.62 (83.6)	2.28 (16.4)	13.90 (100.0)	11.38 (80.8)	2.70 (19.2)	14.08 (100.0)
15 — 18	13.73 (82.9)	2.84 (17.1)	16.57 (100.0)	13.16 (79.2)	3.46 (20.8)	16.62 (100.0)
18 — 21	16.16 (82.8)	3.35 (17.2)	19.51 (100.0)	15.49 (79.1)	4.10 (20.9)	19.59 (100.0)
21 — 24	18.57 (82.4)	3.97 (17.6)	22.54 (100.0)	17.80 (78.7)	4.82 (21.3)	22.62 (100.0)
24 — 28	20.92 (80.9)	4.95 (19.1)	25.87 (100.0)	19.78 (76.3)	6.13 (23.7)	25.91 (100.0)
28 — 34	24.62 (79.7)	6.26 (20.3)	30.88 (100.0)	23.57 (75.9)	7.50 (24.1)	31.07 (100.0)
34 — 43	29.20 (76.9)	8.75 (23.1)	37.95 (100.0)	27.92 (72.8)	10.42 (27.2)	38.34 (100.0)
43 — 55	35.32 (73.6)	12.65 (26.4)	47.97 (100.0)	33.98 (69.8)	14.72 (30.2)	48.70 (100.0)
55 — 75	43.00 (68.6)	19.65 (31.4)	62.65 (100.0)	41.45 (64.9)	22.39 (35.1)	63.84 (100.0)
75 and above	66.30 (54.4)	55.63 (45.6)	121.93 (100.0)	63.42 54.9	52.06 (45.1)	115.48 (100.0)

Note: Figures in brackets indicate percentages to horizontal totals.

SOURCE: Government of India, Ministry of Planning, Department of Statistics, National Sample Survey Organisation, **The National Sample Survey, Twentythird Round—July 1968—June 1969, Number 228, Tables with Notes on Consumer Expenditure,** 1976.

Low level of asset holdings

The majority of the poor live in the rural areas and belong to the categories of landless labourers, small and marginal farmers, rural artisans including fishermen, and backward classes and backward tribes. These people have either no assets or assets with very low productivity, few relevant skills and no regular fulltime jobs or very low paid jobs. The distribution of assets in rural areas, as brought out by the All-India Debt and Investment Survey is given in Table 8. It would be seen from the table that the level of asset holdings of the poorest 30 per cent in rural areas was very low and that there was no significant change in the structure of asset ownership in rural areas during 1961-71. The Planning Commission has defined 'poor households' as those with less than Rs 1,000 of assets in 1961 and Rs 2,500 in 1971. On the basis of these, the percentage of such households increased from 30 per cent in 1961 to 35 per cent in 1971. The bulk of the assets of these poor households consisted only of their huts, some household goods and some livestock.

Wide disparity in land holdings

The principal productive asset in rural areas is land. However, according to the Agricultural Census 1976-77, small and marginal farmers who constituted about 73 per cent of the landholders, operated barely 24 per cent of the land. On the other hand, big farmers (*i.e.* holding more than 10 hectares of land) accounted for only three per cent of the landholders but operated as much as 26 per cent of the land (Table 9).

Under the revised land ceiling laws the land declared surplus was 15.2 lakh hectares of which 10 lakh hectares was taken possession by the states. Up to February 7, 1981, about seven lakh hectares of land was distributed to 12.23 lakh landless labourers.

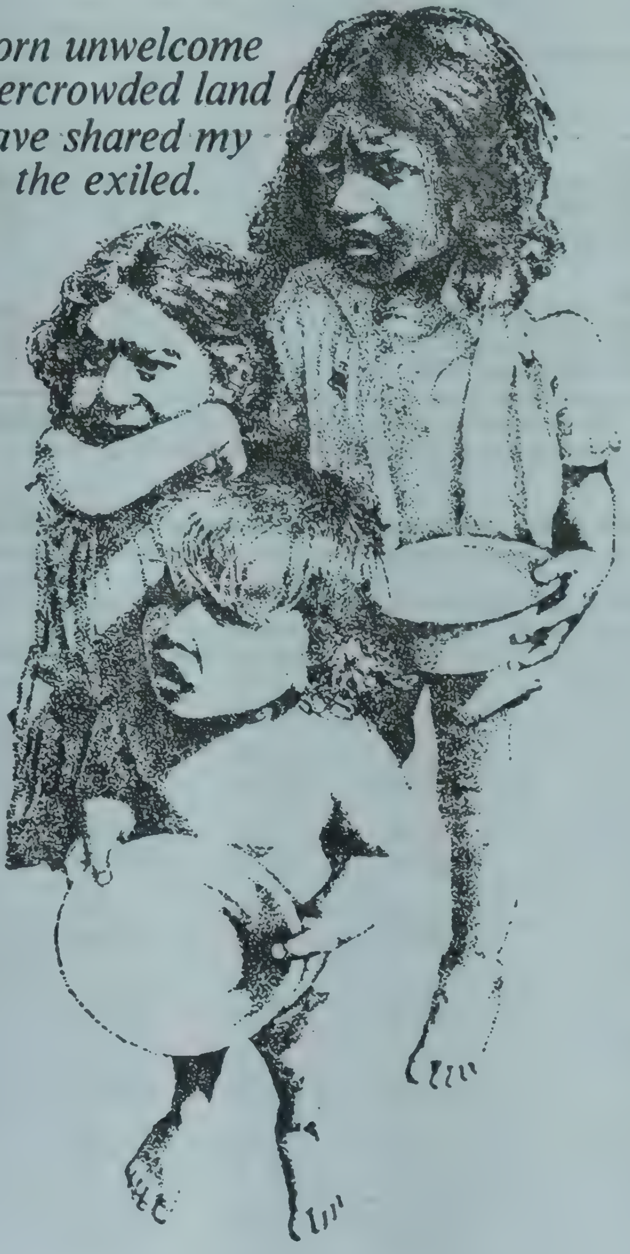
Between 1970-71 and 1976-77, the average size of land holding declined from 2.30 hectares to 2 hectares.

Nutritional deficiency

The consumption standard of an average Indian adult is very low in rela-

Ours is a Magnificent Land-2

I was born unwelcome
into an overcrowded land.
But I have shared my
home with the exiled.



I exist in a village
imprisoned by my fields.
But in quest of my spices
man discovered a globe.

I adorn my emaciation
with the tatters of penury.
But I have gifted the world
the luxury of fine muslin.

My cookfires I light
with the dung of cattle.
But I have taught man the
abstraction of algebra.

I grew up untutored,
unmusic'd and unsung.
But my syncopated sitar
has driven nations to frenzy.

I am surrounded by children
with malnourished minds.
But I have given man
his first philosophy.

I craft shoes that shod
three whole continents.
But I have just begun
to stand on my own bare feet.

I am named by many names
in a babel of tongues.
But I have adopted a name
by strangers given: India

I am sad.
But I am glad.
I am

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We must build a
magnificent future. Think Ahead.

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tion to nutritional requirement. In particular, the protein intake is about one-third of the requirement. An increase in the protein intake, along with other nutritive elements, is absolutely necessary in order to increase the average height, weight and stamina and even improve the brain development of Indians. According to authoritative estimates, the intake of protein in India during recent years has been of the order of 49 grams per capita per day as against 68 grams in Kenya, 78 grams in Turkey and above 100 grams in Australia, New Zealand, Argentina and France. The disparity is particularly marked in respect of the intake of animal protein. In India it is six grams per capita per day against 16 grams in Kenya, 15 grams in Turkey and above 50 grams in the United Kingdom, Germany, Argentina, France, the United States, Canada, Australia and New Zealand. The nutritional level per adult in India is shown in Table 10 while the per capita availability of certain important items of consumption is given in Table 11.

As can be seen from Table 11, during the period 1950-51 to 1979-80 the per capita availability of pulses declined from 61 grams to 30 grams per day or by about 50 per cent, milk from 48 kg (in 1950-51) to 45 kg (in 1978-79) or by six per cent and cotton cloth from 11 metres to 10 metres (about 10 per cent). On the other hand, the availability of man-made fabrics, sugar and tea has shown substantial rise during the same period.

It is generally observed that the availability and the use of luxury items, *i.e.*, items not entering into mass consumption have gone up over the years — the number of refrigerators per million of population increased from 26 in 1960-61 to 278 in 1978-79 and air-conditioners from 25 per million population to 33 per million population. The use of other items like telephones and television sets has also shown marked increase.

An estimate of nutritional inadequacy for 1971-72 shows that the percentage of population suffering from either caloric or protein deficiency (or both) was 28.8 per cent in rural areas and 32.6 per cent in urban areas.

Table 8: Distribution of assets in rural areas

Population group	Percentage share in total assets	
	1961	1971
Lowest 10 per cent	0.1	0.1
Lower 30 per cent	2.5	2.0
Top 30 per cent	79.0	81.9
Top 10 per cent	51.4	51.0

SOURCE: Government of India, Planning Commission, **Sixth Five Year Plan (1980-85).**

Table 9: Distribution of land holdings: 1976-77

Size class	Number of operational holdings		Operated area	
	Lakhs	Per cent	Lakh hectares	Per cent
1. **Marginal** (Below one hectare)	445.3	54.6	175.0	10.7
2. **Small** (Between one and two hectares)	147.0	18.0	208.6	12.8
3. **Semi-medium** (Between two and four hectares)	116.4	14.3	323.6	19.8
4. **Medium** (Between four and ten hectares)	82.1	10.1	496.0	30.4
5. **Large** (Ten hectares and above)	24.4	3.0	428.2	26.3
Total	815.2	100.0	1,631.4	100.0

SOURCE: Government of India, Ministry of Agriculture, Department of Agriculture and Co-operation, Agricultural Census Division, **Agricultural Census Bulletin No. 22, Agricultural Census 1976-77, All-India Estimates**

Table 10: Nutrition level in India

Item	Per adult average daily	
	Requirement (Grams)	Consumption (Grams)
Cereals	400	471
Pulses, nuts and oilseeds	85	68
Green leafy vegetables	114	88
Other vegetables and roots	170	91
Fruits	85	6
Milk and milk products	284	80
Sugar and gur	57	20
Vegetable oil, ghee, etc.	57	14
Fish, meat and egg	125	14
Calorific value of the total intake	2,700	2,100

SOURCE: Indian Council of Medical Research, **The Nutritive Value of Indian Foodstuffs and the Planning of Satisfactory Diets,** Seventh Edition, New Delhi, 1968.

According to the World Development Report 1980 published by the World Bank, the per capita per day supply of calories in India in 1977 was quite low at 2,021 which formed 91 per cent of the requirement. The figures for some countries speak for themselves: Poland — 3,656 (140 per cent), German Democratic Republic (GDR) — 3,641 (139 per cent), Bulgaria — 3,611 (144 per cent), Belgium — 3,583 (136 per cent), USA — 3,576 (135 per cent),

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Ireland — 3,541 (141 per cent) and Austria — 3,535 (134 per cent).

The best and the direct way to attack poverty is to increase production of key nutritive items like milk, eggs and fish, green vegetables and fruits as also improve the purchasing power of the people to increase the consumption of these items. The problem of nutrition has two aspects. First, malnutrition of vast masses implies gross inequality and social injustice. Secondly, malnutrition is also responsible for the low level of per worker productivity.

Inadequate medical facilities

Sustained efforts towards promotion of health care services during the last 30 years have resulted in significant improvement in the health status of the country. The mortality rate declined from 27.4 in 1941-51 to 14.2 in 1978. The life expectancy at birth has improved from 32 years in 1951 to about 52 years in 1976-81. The infant mortality rate has come down from 146 during the fifties to 129 in 1976. There has also been improvement in doctor-population ratio which varies widely from one doctor for 8,333 in Meghalaya to one doctor for 1,400 in Delhi (1977). The hospital bed-population ratio has also shown improvement from 32 beds per lakh of population in 1951 to 73 beds per lakh of population in 1976.

However, despite all these improvements, it is noted that the best of the doctors and hospital facilities and a disproportionately large share of health services are in the urban areas. On the other hand, situation in villages is abominable. The Government medical facilities are practically free but the quality of services is so poor that those who can afford generally prefer to avail themselves of the services of the private practitioners. Again, there is a dearth of doctors in the rural areas.

Strategy for Sixth Plan

Even after three decades of planning large segments of the population have yet to share in the benefits of progress or participate in the process of development. Although several programmes like Small Farmers' Development Agency (SFDA) and Marginal Farmers and Agricultural Labourers (MFAL) were undertaken since the Fourth Plan to help backward areas and weaker sections, the impact of these programmes was rather limited. There is an urgent need for more effective implementation of assets transfer measures such as land reforms, more equitable distribution of credit and a co-ordinated effort which would enable the poor to join the mainstream of economic activity and provide them with an opportunity for advancement.

An evaluation survey of SFDA/MFAL projects by the Programme Evaluation Organisation (PEO) of the Planning Commission in 1974-75 (published in January 1979) revealed many deficiencies in the programme, such as weak co-operative infrastructure in the project areas and almost total neglect of agricultural labourers in the matter of credit. There was also low participation in irrigation programmes in some of the areas. The Integrated Rural Development Programme (IRDP) was devised taking into account the findings of this survey.

The Sixth Five Year Plan (1980-85) has placed a very high priority on the alleviation of poverty. The public sector outlay in the Sixth Plan provides for many poverty alleviation programmes which operate mainly by way of transforming assets and skills and by providing employment in the slack seasons of the year. The Integrated Rural Development Programme (IRDP) belongs to the former category and the National Rural Employment Programme (NREP) to the latter. Besides, there are a large number of other public sector schemes which would contribute to the reduction of unemployment and underemployment. Some of the schemes which could be cited here are: special component plan for the uplift of scheduled castes, special programmes for drought-prone areas; tribal areas and hill areas and the minimum needs programme. The objectives of these programmes would be to improve productivity and therefore income of the poor and also to ensure that employment opportunities are enlarged at a faster pace. The details of some of the programmes to be pursued during the Sixth Plan are given in the following paragraphs.

Integrated Rural Development Programme

The main objective of the IRDP during the Sixth Plan would be to evolve an operationally integrated strategy—increasing production and productivity in agriculture and allied sectors on the one hand and development of resource and income of vulnerable sections of the population in all the blocks of the country on the other.

The total number of households to be covered under the IRDP during the Plan period would be nearly 3,000 fami-

Table II: Per capita per year availability of certain important articles of consumption in India

Year	Edible oils (kg)	Vanaspati (kg)	Sugar* (kg)	Cotton cloth** (Metres)	Man-made fibre fabrics** (Metre)	Tea (Grams)	Coffee (Grams)	Milk (Kg)	Cereals** (Grams per day)	Pulses** (Grams per day)
1950-51	2.7	...	3.0	11.0	0.5	260	51	48	334	61
1955-56	2.5	0.7	5.0	14.4	...	257	67	...	361	70
1960-61	3.2	0.8	4.7	13.8	1.2	287	80	...	400	69
1965-66	2.7	0.8	5.7	14.7	1.7	337	70	40	360	48
1970-71	3.5	1.0	7.3	13.6	2.0	387	113	42	418	51
1974-75	3.3	0.6	5.9	12.9	1.7	444	63	40	367	40
1975-76	3.5	0.8	6.2	12.6	2.0	455	63	42	402	51
1976-77	3.2	0.9	6.2	11.4	2.4	469	72	43	391	44
1977-78	3.8	0.9	7.3	9.5	4.0	479	72	44	427	44
1978-79	3.8	1.0	9.7	10.2	4.8	498	78	45	435	45
1979-80	3.7	1.0	8.0	10.2	4.6	518	60	...	384	30

Notes: (...) = Not available
(*) = Data relate to November-October season
(**) = Data relate to calendar years, e.g., 1955-56 figures relate to 1956 calendar year and so on.

SOURCE: Government of India, **Economic Survey, 1971-72** and **1980-81.**

lies per block. These families would be from the bottom deciles of the rural population below the poverty line. There are altogether 5,000 blocks in the country. In other words, the programme proposed to cover 7.5 crore people—more than 13 per cent of the rural population. The total investment outlay would be Rs 1,500 crores, supplemented by Rs 3,000 crores from institutional finance. On the basis of this transfer of assets, it would be possible to generate an income of Rs 3,000 crores per annum. The amount of income transfer would help bring nearly 11 per cent of the rural population (6.1 crores in 1984-85) above the poverty line covering about 1.2 crore households in the rural sector. Besides, a provision has been made in the Plan to move 61 lakh poor people from the urban sector above the poverty line by providing additional consumption benefits to these people mainly through public redistributive services like health, education and sanitation, housing and drinking water and urban slum improvement programmes.

National Rural Employment Programme

The problem of employment in rural areas is mainly of seasonal unemployment and underemployment. It is therefore necessary that fuller employment opportunities for the rural work force should be found within the agricultural and allied sectors through intensification and diversification of agriculture based on expansion of irrigation and improved technology.

As for providing supplementary employment opportunities, a beginning was made in this direction through the Food-for-Work Programme. The beneficiaries of various development projects and the rural development programmes would mainly be those with an asset base whereas in rural areas a large number of people are without assets or with grossly inadequate assets. This segment of the rural poor which largely depends on wage employment has virtually no source of income during the lean agricultural period. The PEO had carried out an evaluation survey of the Food-for-Work Programme during August-October 1979. The main findings were that at many places work done under the programme was not durable and most of the works related to construction of link roads and embankments. Subsequently, the National Rural Employment Programme (NREP) was conceived mainly to take care of this segment of the rural poor.

An outlay of Rs 980 crores has been provided for the NREP for the Sixth Plan period in the Central sector. There would be a provision in the State Plans for this programme from 1981-82 onwards as it would be operated on 50:50 sharing basis. The Centre would provide its share in the form of foodgrains to the extent surplus foodgrains are available and the rest in cash.

Under the programme, the implementing agencies would be required to give priority to works relating to social forestry and pasture development, soil and water conservation, irrigation, flood protection and drainage, field channels in irrigation command areas, construction and improvement of village tanks and ponds, school and dispensary buildings and works to improve village environments, hygiene and sanitation.

In order to ensure that benefits of the NREP reach the weaker sections of the society, at least 10 per cent of the allocation under the programme would be earmarked for utilisation exclusively on programmes of direct benefits to scheduled castes such as drinking water in Harijan bastis, community irrigation schemes in which the majority of the beneficiaries would be Harijans, environmental works in Harijan localities and housesites group housing for Harijans.

Minimum Needs Programme

The Minimum Needs Programme is essentially an investment in human resource development. The provision of free or subsidised services through public agencies is expected to improve the consumption levels of those living below the poverty line and thereby improve the productive efficiency of both the rural and urban workers. The Sixth Plan has provided a much larger outlay of Rs 5,807 crores (Rs 4,926 crores in state plans and Rs 883 crores in the Central plan) for the programme than Rs 2,607 crores for the Fifth Plan. The various components of the MNP with their respective outlays in brackets are: rural water supply (Rs 2,007 crores) rural roads (Rs 1,165 crores), elementary education (Rs 905 crores), rural health (Rs 577 crores), housing assistance to rural landless labourers (Rs 354 crores), rural electrification (Rs 301 crores), nutrition (Rs 219 crores), environmental improvement of urban slums (Rs 151 crores) and adult education (Rs 128 crores). The objectives and targets for the Plan period for these components are given below:

(i) *Rural water supply*: According to a survey conducted in 1971-72 in all 1,52,475 villages were declared "problem villages" in the country in respect of drinking water supply. The statewise number of problem villages is given in Table 12. Subsequently, more villages were declared problem villages by states. The number was estimated to be 1.90 lakhs as on April 1, 1980. The identification of problem villages was done on the following criteria: (a) villages which did not have an assured source of drinking water within a reasonable distance of 1.6 km, (b) villages which were endemic to diseases like cholera, guinea-worm, etc and (c) villages where the available water had an excess of salinity, iron, fluorides or other toxic elements.

Table 12: Statewise problem villages

State/Union Territory	Number of villages
States	
Andhra Pradesh	6.133
Assam	7,619
Bihar	35,000
Gujarat	3,000
Haryana	4,191
Himachal Pradesh	9,400
Jammu and Kashmir	4,000
Karnataka	8,252
Kerala	1,514
Madhya Pradesh	14,020
Maharashtra	5,233
Manipur	1,100
Meghalaya	3,306
Nagaland	814
Orissa	4,619
Punjab	2,340
Rajasthan	4,277
Sikkim	N.A.
Tamil Nadu	2.585
Tripura	3,396
Uttar Pradesh	15,478
West Bengal	12,451
Union Territories	
Andaman and Nicobar	70
Arunachal Pradesh	2,451
Chandigarh	—
Dadra and Nagar Haveli	72
Delhi	145
Goa, Daman & Diu	241
Lakshadweep	—
Mizoram	693
Pondicherry	75
All-India	1,52,475

N.A. = Not available
(—) = Nil

SOURCE: Answer to the **Starred Question No. 594** in the **Lok Sabha** on 30th March, 1981.

During the Sixth Plan efforts would be made to cover all the problem villages providing them with safe drinking water.

(ii) *Rural roads*: Under the Fifth Plan, the norm was to link up all villages with a population of 1,500 or more with all-weather roads. It is now proposed to connect with roads all the remaining villages with a population of 1,500 and above and 50 per cent of the villages in the population group 1,000—1,500 by 1990. The number of villages remaining to be linked according to the above norm was 40,000 as on April 1, 1980. About 50 per cent or 20,000 of these villages would be covered by 1985.

(iii) *Elementary education*: The objective would be the universalisation of elementary education by achieving 100 per cent enrolment in the age group 6-14 by 1990. It is envisaged to achieve

95 per cent of enrolment in the age group 6-11 and 50 per cent in the age group 11-14 by 1985 and this would be supplemented by non-formal education.

(iv) *Rural health*: The rural health infrastructure would be further strengthened to achieve the objective of health for all by 2000 AD. The norms envisaged for this would be: (a) one community health volunteer for every village or a population of 1,000 chosen by the community to form the base unit, (b) one sub-centre for a population of 5,000 in plains and 3,000 in hilly and tribal areas, (c) one primary health centre for 30,000 population in the plains and 20,000 population in hilly and tribal areas and (d) one community health centre for a population of one lakh or one community development block.

(v) *Housing assistance to rural landless labourers* : The number of landless labour households needing housing assistance is estimated to be around 145 lakhs by March 1985. So far 77 lakh landless families were allotted housesites. The remaining 68 lakh familities would be provided housesites by 1985.

(vi) *Rural electrification* : It is proposed to ensure that at least 60 per cent of villages in each State and Union Territory are electrified by 1990. Of the total number of 1,15,165 villages required to be electrified to achieve this target, 40 per cent or about 46,464 additional villages would be electrified during 1980-85.

(vii) *Nutrition* : This programme has two components : (a) special nutrition and (b) mid-day meals. While the former was introduced in 1970-71, the latter came into being much earlier in 1962-63.

Under special nutrition, 300 calories and 8-12 grams of protein are provided to children in the group 0-6 for 300 days and 500 calories and 25 grams of protein for the pregnant and nursing mothers for 300 days. The eligible target group for this programme as on April 1, 1980 was 700 lakh children of 0-6 years and 70 lakh mothers. The scheme is estimated to have covered 81.8 lakhs — 57.3 lakhs outside the Plan and 24.5 lakhs under the Plan — by the end of March 1980. During the Sixth Plan an additional 50 lakh children and five lakh women would be rovered by providing integrated services of feeding, health welfare, etc.

Under the mid-day meals programme children of 6-11 age group are provided with mid-day meals for 200 days in a year and 300 calories and 8-12 grams of protein per child per day. During the Sixth Plan it is proposed to continue the existing level of beneficiaries of about 174 lakh children as also to integrate the programme with other essential services.

(viii) *Environmental improvement of urban slums* : Of the urban population nearly a fifth is estimated to constitute slum population. The slum population in 1985 needing attention is estimated to be about 331 lakhs. Of this, only 68 lakhs were covered by March 1980. It is proposed to cover about 40 per cent or 100 lakh slum population by 1985. Under this programme facilities like water supply, storm water drains, paving of streets, street lighting and community latrines are provided.

(ix) *Adult education* : Non-formal education for adults, particularly in the productive age group 15-35 years, is in fact a part of the elementary education component of the MNP. It is proposed to achieve 100 per cent coverage of the age group 15-35 years by 1990.

Impact of development programmes

The Planning Commission in the Sixth Five Year Plan document has worked out the projections for the average monthly per capita consumption expenditure in urban and rural areas, taking into consideration the impact of various developmental programmes to be implemented during the Plan period (Table 13).

It would be seen from the table that the average monthly per capita consumption expenditure in 1979-80 (at current prices) was put at Rs 87.97 for rural areas, Rs 123.16 for urban areas and Rs 95.62 for the country. The percentages of people below the poverty line were estimated to be 50.7 in the rural areas, 40.3 in the urban areas and 48.4 in the country as a whole.

Without taking into account the redistribution likely to arise out of the developmental programmes, the percentages of people below the poverty line would have been 40.5 for rural, 33.7 for urban and 38.9 for the country by 1984-85. However, after considering the expected benefits from such programmes the proportion of the people below the poverty line was expected to come down to 30 per cent in all categories.

Table 13: Consumption expenditure

A. Consumption expenditure*: 1979-80

Population Group	Average monthly per capita consumption (Prices)			Number of people (in million)		
	Rural	Urban	Total	Rural	Urban	Total
Bottom decile	32.11	41.38	34.12	51.20	14.21	65.41
Below poverty line**	51.27	59.75	52.80	259.56 (50.70)	57.28 (40.31)	316.84 (48.44)
Total population	87.97	123.16	95.62	512.00	142.10	654.10

B. Consumption expenditure*: 1984-85
(without redistribution)

Population Group	Average monthly per capita consumption (Rupees at 1979-80 Prices)			Number of people (in million)		
	Rural	Urban	Total	Rural	Urban	Total
Bottom decile	37.07	46.06	39.12	55.34	16.38	71.72
Below poverty line**	53.44	61.37	55.01	223.97 (40.47)	55.21 (33.71)	279.1 (38.9)
Total population	101.55	137.10	109.67	553.40	163.80	717.20

C. Consumption expenditure : 1984-85
(with redistribution)

Population Group	Average monthly per capita consumption (Rupees at 1979-80 Prices)			Number of people (in million)		
	Rural	Urban	Total	Rural	Urban	Total
People below poverty line**	60.31	64.09	61.17	166.02 (30.0)	49.14 (30.0)	215.16 (30.0)
Total population	101.55	137.10	109.67	553.40	163.80	717.20

Notes: * With same consumption distribution as in 1977-78
** Figures in brackets are percentage of people below the poverty line

SOURCE: Government of India, Planning Commission, **Sixth Five Year Plan (1980-85).**

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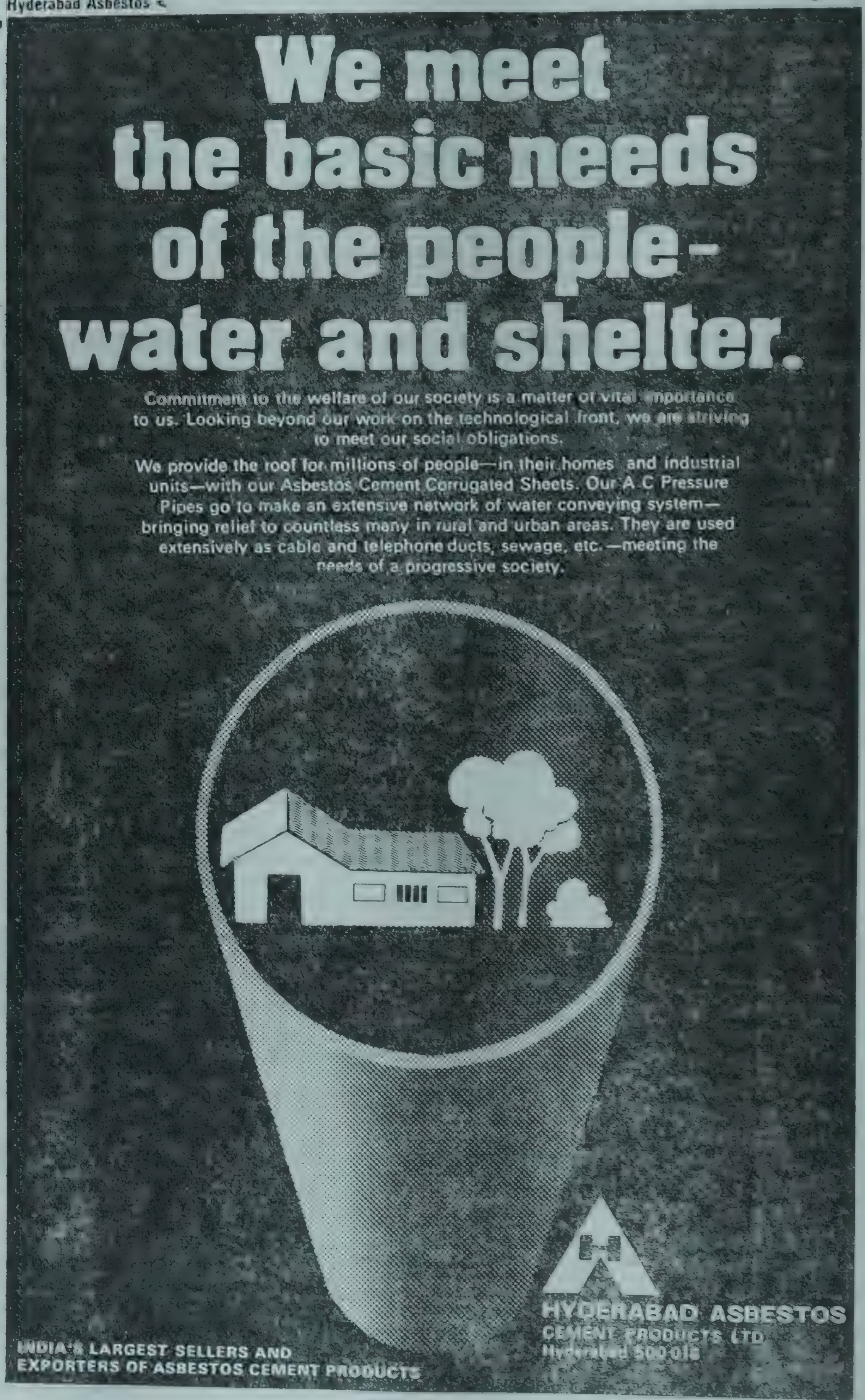

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The hard-pressed agricultural labourers

From A SPECIAL CORRESPONDENT

HYDERABAD

ON August 15, 1981, India will be celebrating the 34th anniversary of independence. Where, on the path of progress does this occasion find the people of Andhra Pradesh?

The number of people below the poverty line stood at 206.79 lakhs or 42.18 per cent of the population—170.35 lakhs or 43.89 per cent in the rural areas and 36.44 lakhs or 35.68 per cent in the urban areas. The poverty line is defined as Rs 65 per capita per month of consumption expenditure in 1977-78 prices corresponding to the minimum daily calorie requirement of 2,400 per person in rural areas and that of Rs 75 corresponding to the calorie requirement of 2,100 in urban areas.

The State's domestic product at 1970-71 prices was Rs 2,522.8 crores in 1970-71 and Rs 3,256 crores in 1979-80. The per capita income (at 1970-71 prices) during the same period increased from Rs 586 in 1970-71 to Rs 648 in 1979-80.

The State Government has been proclaiming through advertisements its great achievements. The achievements are manifold, particularly in agriculture, education, health, power and communication. But it will be foolish to regard that the above are beneficial to all alike. In an economy like India's, the ownership of the means of production and exchange *i.e.* land, factories and income determines the levels of living of the population.

To begin with, let us see the levels of living of the lowest strata—the agricultural labourers. According to the 1971 census they constituted seven million or about 38 per cent of the rural workforce in Andhra Pradesh. Till today, they have no fixed hours of work or payment. They are paid the least for the hardest manual labour, in rain and sun, without any rules or acts to protect them. Most of them belong to scheduled castes. Ninety per cent of their total income is spent on food. Just 50 per cent of those eligible have been allotted land sites by the Government for housing, of which not even one per cent is *pucca*. Their children cannot afford to go to school. Higher studies are possible for less than one per cent. They have access only to the community well or the public water tanks and canals. Medical care has reached them, but their main disease is

Some selected indicators of levels of living : Andhra Pradesh

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	360	534	4,392	6,838
	Rural population					
	(i) Lakhs		297	411	3,603	5,020(a)
	(ii) As per cent of total population		82.6	76.8	82.0	76.3(a)
II.	**Literacy**	Per cent	24.6	29.9	28.3	36.2
	(a) Males	Per cent	35.0	39.1	40.4	46.7
	(b) Females	Per cent	14.0	20.5	15.3	24.9
	Rural literacy	Per cent	..	19.2 (1971)	..	23.7 (1971)
	(a) Males	Per cent	..	27.3 (1971)	..	33.8 (1971)
	(b) Females	Per cent	..	10.9 (1971)	..	13.2 (1971)
	Urban liberacy	Per cent	..	47.1 (1971)	..	52.4 (1971)
	(a) Males	Per cent	..	57.3 (1971)	..	61.3 (1971)
	(b) Females	Per cent	..	36.3 (1971)	..	42.1 (1971)
III.	**Occupational Classification**					
	Working population	1971		Lakhs	180	1,805
	Per centage of working force to total population	1971		Per cent	41.4	32.9
	Percentage to total working force	1971		Per cent		
	(i) Agricultural labourers ..				37.9	26.3
	(ii) Livestock, forestry, fishing, plantations etc.				3.3	2.4
	(iii) Industry				11.1	11.2
	(iv) Others				47.7	60.1
IV.	Population below poverty line ..	1977-78		Lakhs	206.8	3,046.1
	(a) Rural	1977-78		Lakhs	170.4	2 527.7
	(b) Urban	1977-78		Lakhs	36 4	518 4
V.	Population below the line of poverty as per cent of estimated total population	1977-78		Per cent	42.2	48.1
	(a) Rural	1977-78		Per cent	43.9	50.8
	(b) Urban	1977-78		Per cent	35.7	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)					
	Unemployed persons	September 30, 1980		'000 number	1.442	16,200
	Educated unemployed	June 30, 1980		'000 number	601.6	7,297.0
VII.	**State National income** (at current prices)	1979-80		Rs. crores	5,910	90,374
	Per capita State National income (at current prices)	1979-80		Rs.	1,176	1,379
	Rate of growth of per capita State income (at 1970-71 prices) ..	Between 1970-71 and 1979-80		Per cent	1.1	0.8
	Structure of State/National income at current prices					
	Share in State/National domestic product (at current prices) ..	1977-78		Per cent		
	(i) Agriculture and animal husbandry				47.1	40.5
	(ii) Manufacturing				10.9	15.2
	(iii) Public administration and other services				11.5	9.8
VIII.	**Health**					
	Number of hospital beds per '000 population	December-end 1977		Number	73.2	79.0
IX.	**Per capita availability of:**					
	(i) Cereals	1979-80		Grammes per day	493	384
	ii) Pulses	1979-80		Grammes per day	18	30
	iii) Milk	1977-78		Kg. per year	36	45
X.	**Per capita**					
	i) Assets	1971-72		Rs	8,081	11,311
	ii) Debts	1971-72		Rs.	1,356	1,167

Notes: (a) Excludes Assam and Jammu & Kashmir.
(..) Not available.

Commerce Research Bureau

malnutrition which is outside the jurisdiction of medical care. Within the Andhra region the level of living of the agricultural workers in Krishna, Godavari (East & West) Visakhapatnam, Guntur, Nellore and Ongole districts has improved somewhat. Though they are still below the poverty line, their wage rates and conditions of their employment have improved, while those of their brothers in other areas, particularly in the Telengana Region have gone from bad to worse resulting in their migration to Madras and Bombay as construction workers and up to Punjab as agricultural workers.

Andhra Pradesh has about 22.3 lakh population of scheduled tribes. Because of the laws against deforestation and the entry of merchants and moneylenders, their lives are miserable. Srikakulam in the early seventies and Indravilli in Adilabad just this year are witness to their desperate protests.

Let us turn to the marginal farmers. However much the official economists may say that the terms of trade are favouring the agricultural commodities, the rising costs of inputs, especially fertilisers, proves this a myth. No one feels the pinch of this more than the marginal farmer. During the fifties, they were at least well nourished, but no more. Because of the penetration of dairies and high prices of pulses, they are compelled to sell milk and pulses, (sources of protein, fat and vitamines) to balance the family budget. To some extent they have benefited from education and better health facilities.

Despite land legislation, even today several land owners hold thousands of hectares, under the guise of orchards and co-operatives. Earlier they used to lease out land which they have now put to farming, with modern inputs. These big land owners along with rich peasants have grabbed most of the government-provided agricultural subsidies. They have a heyday, atleast for the time being. Along with farming and money lending, many of them have turned to commerce and speculation in township lands. For the last five years, the value of land around towns has been almost doubling every year. There is a tremendous increase in the standard of living of this stratum. In the fifties, the landlord was a miser consumer, restricting himself to a tiled house, cotton rags, chappals and a stick. The landlord today boasts of modern bungalows, two and four wheelers and electrical appliances. He is the master of local litigation and panchayat and legislative politics.

There is very little industrial development in Andhra. Most of the major industries are either State or Centre-owned. Even the little development is lopsided, centred around Hyderabad, Vishakhapatnam and Guntur. The State's surplus capital is flowing not into industry but into commerce, money lending, speculation and film production.

The industrial working class is 11 per cent of the total work force. In the organised sector they are able to retain their standard of living, but in the unorganised sector the standard is going down.

There is a manifold increase in the size of the middle class. It is a privilege for the educated to have a job today. Unemployment among the educated had reached six lakhs (registered unemployed) in 1980. Every year about a thousand graduates in engineering, medicine and agriculture each are coming to the job market, which is already saturated. As a result they are migrating to other states as also to other countries. In addition to the above, several thousand graduates in the faculties of arts and science and polytechnic are being turned out every year with no employment prospects. What is worse is that, though most of them are drawn from peasantry, they neither know farming nor are willing to do it. They have to live an uninspired life.

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ASSAM

Extensive malnutrition

From OUR SPECIAL CORRESPONDENT

GAUHATI

ASSAM, with its vast natural resources like crude oil, natural gas, coal, lime stone and rich forests, presents a paradoxical picture of backwardness in the midst of potential plenty. Malnutrition is a major contributor to the high rate of infant and child mortality. A rough idea of the extent of malnutrition can be had from the fact that more than 60 per cent in the State still live below the poverty line. The level of income of sizable section of the population is such that even after spending 80 per cent of their income on food alone, they are not in a position to have a balanced diet. Protein-calorie-malnutrition is widely prevalent. A study made by the National Institute of Public Co-operation and Child Development recently revealed that a large percentage of pre-school children (75.3) had today weight below 75 per cent of standard weight for the age.

Assam with an area of 78,523 sq km accounts for 2.4 per cent of the country's total area and shelters 2.7 per cent of her population. The State with its 1.46 crore population in 1971 recorded a rate of increase much higher than the nation's average. This higher growth rate has been attributed mainly to immigration from both the rest of the country and outside it. During the decades 1951-61 and 1961-71, the population of the state increased by 34.98 per cent and 34.95 per cent against the country's 21.52 per cent and 24.82 per cent respectively.

The abnormal growth not only inflated the size of the State's total population, but also created economic, social, and political problems. The Draft Five Year Plan for 1980-85 reveals that Assam's net domestic product at constant prices rose at a flattering rate of 35 per cent during the seventies while the per capita net domestic product increased by only 6.2 per cent. A comparison of the growth of the State income with that of the national income brings the State's relative backwardness to focus. Taking three years averages, the national income at current prices grew by 384.7 per cent from 1961-64 to 1976-79 while the per capita national income rose by 250 per cent over the same period from Rs 335.6 to Rs 1,174.7. On the other hand, during that period the State's income increased by only 329.7 per cent and per capita income by only 174.4 per cent from Rs 332.2 to Rs 914.30.

The poverty indicator, too, is far from reassuring. Taking 2,700 calories

Some selected indicators of levels of living: Assam

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	108	199	4,392	6,838
	Rural population					
	(i) Lakhs		101	...	3,603	5,020
	(ii) As per cent of total population		92.8	...	82.0	76.3(a)
II.	**Literacy**	Per cent	33.0	...	28.3	36.2
	(a) Males	Per cent	44.3	...	40.4	46.7
	(b) Females	Per cent	19 6	...	15.3	24.9
	Rural literacy	Per cent	...	25.2 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	33.8 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	15.9 (1971)	...	13.2.(1971)
	Urban literacy	Per cent	...	58.3 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	64.2 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	50.4 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	41	1,805
	Percentage of working force to total population	1971	Per cent	28.0	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers ..			9.9	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			10.9	2.4
	(iii) Industry			5.5	11.2
	(iv) Others			73.7	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	95.4	3,046.1
	(a) Rural	1977-78	Lakhs	88.3	2,527.7
	(b) Urban	1977-78	Lakhs	7.1	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	51.0	48.1
	(a) Rural	1977-78	Per cent	52.7	50.8
	(b) Urban	1977-78	Per cent	37.4	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	315	16,200
	Educated unemployed	June 30, 1980	'000 number	136.1	7,297.0
VII.	**State/National income** (at current prices)	1978-79	Rs crores	1,754	81,429
	Per capita State/National income (at current prices)	1978-79	Rs	960	1 267
	Rate of growth of per capita State income (at 1970-71 prices) ..	Between 1970-71 and 1978-79	Per cent	0.8	1.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices) ..	1977-78	Per cent		
	(i) Agriculture and animal husbandry			51.2	40.5
	(ii) Manufacturing			12.3	15.2
	(iii) Public administration and other services			7.9	9·8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	37.2(b)	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	283	384
	(ii) Pulses	1979-80	Grammes per day	6	30
	(iii) Milk	1977-78	Kg. per year	24	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs	7,832	11,311
	(ii) Debts	1971-72	Rs	672	1,167

Notes: (a) Excludes Assam and Jammu & Kashmir.
(b) Data relates to 1975 (*) Projected population.
(...) Not available.

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per consumer unit per day as the minimum standard, house-holds below it amounted to 55 per cent of the total in the rural areas of the state in 1973-74 as against 49 per cent in the entire country as a whole. A bird's eye view on the composition of State's income reveals its continued heavy dependence on the primary sector. The contribution from the primary sector at current prices was 63.9 per cent in the early seventies and 57.6 per cent in 1978-79 while the corresponding figure for the secondary sector were 14.09 per cent and 15.1 per cent only.

The increase in State income also does not necessarily reflect any real growth. It rose by around Rs 400 crores from 1973-74 to 1976-77 but about Rs 250 crores of this increase was accounted for by increased prices fetched by tea and minerals. Agriculture proper accounted for only Rs 75 crores of the increase although around two thirds of the working force in the State are directly engaged in the fields. In spite of the agriculture being the mainstay of the State's economy, it displays only signs of underdevelopment and backwardness. It is characterised by relatively small holdings and the 1976-77 agricultural census had recorded 82 per cent of the holdings and 48 per cent of the cropped area as being covered by holdings below 2 acres each while the crop intensity was recorded at as low as 123.5.

During 1971 census 40.88 lakh persons in the State were recorded as workers. Out of them 55.86 per cent were cultivators, 9.92 per cent agricultural labourers, 10.91 per cent engaged in animal husbandry, fisheries and forestry, thus making a total of 76.69 per cent. In household industry 1.30 per cent were engaged while 2.75 per cent in other industries making a total of only 4.14 per cent. This shows that while ¾th of the workers depended on the primary sector, less than 5 per cent derived livelihood from industry.

The problem of unemployment in the State has been growing steadily leading to poverty and backwardness. The Live Register of the Employment Exchanges contained 3.31 lakh names in June, 1980. The more significant fact is that the share of those with higher education has grown from 18 per cent in 1965 to 42 per cent in 1980.

However, the employment statistics as obtained from the Employment Exchanges reflect only the trend and not the totality of employment as all unemployed persons do not and cannot register themselves with the exchanges which are mostly located in the urban areas while bulk of the unemployment manifests itself in rural areas. Available estimates indicate that for at least five to seven months in a year, a sizable population remain idle for want of any subsidiary occupation.

Assam's percentage of literacy is 28.1 against 60.4 for Kerala, 39 for Tamil Nadu, 36 for Gujarat and 29.5 for all-India. In the field of female literacy the percentage for the State is just comparable with all-India average. Over the two decades 1951-71, the literacy percentage in the State has increased from 18.3 to 28.1 while for the country the increase is from 16.6 to 29.5. However, enrolment in educational institutions over the years 1955-56 to 1975-76 has shown substantial increase at all levels. In 1977-78, the school going children in different age groups in the State comprised 76 per cent children in 6-11 years, 44 per cent of those in 11-14 years and 25 per cent in 14-16 years age group. However, there are still over 2,000 villages in the State without a primary school which cover an estimated population of 8.6 lakhs of which 1.6 lakhs are children in the age group of 6-11 years. Over the period from 1961-62 to 1976-77, the number of primary schools per lakh of population declined from 131 to 114.

In regard to health facilities, the situation in rural areas particularly — is far from satisfactory where the facilities are considerably below the minimal requirement. However, during the successive five year plans, efforts have been made to control communicable diseases and to strengthen the basic health services in the State. In spite of all efforts health conditions remained poor. Infant and maternal mortality rates are still higher in rural areas. The shortage of doctors and para-medical personnel is an added factor for poor health condition in the State where only 33 per cent of its rural population is covered by basic health services. Out of 130 blocks in the State, 121 primary health centres are functioning of which only 88 have one doctor each, according to latest figures. The shortage of doctors in PHCs has resulted in low achievement of targets of immunisation fixed by the Central Government and other basic medical facilities.

Assam's relative backwardness is eloquently reflected in several other fields as well. The road length in 1978-79 was 111.5 km per lakh of estimated population as against the corresponding national figure of 235 km. The per capita consumption of electricity was as low as 30 units as against 130 units for the country as a whole in March 1980. Till 1980 only 15.6 per cent of the State's villages had been electrified while the country's average had been 41.8 per cent. The number of bank offices per one lakh population was only four in 1980 with per capita bank credit standing at about Rs 40.

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BIHAR

Abject poverty and privation

From OUR SPECIAL CORRESPONDENT

PATNA

BIHAR with 74.8 per cent people still living below the poverty line has a hopelessly low and miserable standard of living. Most people are languishing in abject poverty, privation and illiteracy. The basic problems which afflicted the people in the early post-independence era still very much exist there nor can they be solved even within the coming 20 years. Problems of unemployment, housing, health and education are as acute as they were be in the past years.

During the last few years Bihar's economy has looked up and the growth rate and per capita income have shown signs of recovery and improvement, but this has not had to any impact on the living standards of the people. The fact is per capita income in the State has not only failed to keep pace with that of the country but on the contrary it has declined. So also the per capita investment and central assistance. Even in the matter of per capita power consumption the State's figure is only 84 kwh as against 100 kwh for the country as a whole. Bihar has only 38 km of surfaced roads per lakh of population against 90 km for the country.

Besides this, the standard of living throughout the State is uneven. It sharply differs from man to man and region to region, and community to community. The State with its three distinctly geographical regions quite separate from each other, has three distinct standards of living. The people of North Bihar with highly fertile lands and higher per acreage productivity are enjoying the highest standard of living followed by South Bihar Plain. Inhabitants of Chhotanagpur plateu have perhaps the lowest and most miserable living standard, where nature is comparatively unkind with infertile rocky soil.

Glaring inequality in income which of course greatly influences the living pattern and subsequently bedevils socio-economic relation is the worst bane of State. Economic benefits which accrued to their predominantly agricultural State during planning period are not evenly distributed. Resultantly, the more privileged section of the society has pocketed the lion's share of the fruits of development and the less privileged classes mainly small farmers, agricultural labourers have received practically nothing it. The living standards of landless agricultural labourers, who constituted 84 per cent of the total labour force, has gone down. Although the Government has

Some selected indicators of levels of living: Bihar

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	464	698	4,392	6,838
	Rural population					
	(i) Lakhs		425	611	3,603	5,020(a)
	(ii) As per cent of total population		91.6	87.5	82.0	76.3(a)
II	**Literacy**	Per cent	21.8	26.0	28.3	36.2
	(a) Males	Per cent	35.2	37.8	40.4	46.7
	(b) Females	Per cent	8.2	13.6	15.3	24.9
	Rural literacy	Per cent	...	17.2 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	27.6 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	6.4 (1971)	...	13.2 (1971)
	Urban literacy	Per cent	...	44.9 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	55.4 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	31.9 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	175	1,805
	Percentage of working force to total population	1971	Per cent	31.0	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			38.9	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			1.0	2.4
	(iii) Industry			7.2	11.2
	(iv) Others			53.9	60.1
IV.	Population below poverty line	1977-78	Lakhs	371.4	3,046.1
	(a) Rural	1977-78	Lakhs	338.4	2,527.7
	(b) Urban	1977-78	Lakhs	33.0	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	57.5	48.1
	(a) Rural	1977-78	Per cent	58.9	50.8
	(b) Urban	1977-78	Per cent	46.1	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	2,294	16,200
	Educated unemployed	June 30, 1980	'000 number	711.6	7,297.0
VII.	**State/National income** (at current prices)	1977-78	Rs. crores	4,693	76.330
	Per capita State/National income (at current prices)	1977-78	Rs.	735	1,210
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1977-78	Per cent	1.0	1.5
	Structure of State/National income at current pirces				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			46.8	40.5
	(ii) Manufacturing			12.3	15.2
	(iii) Public administration and other services			7.7	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	38.8(b)	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	265	384
	(ii) Pulses	1979-80	Grammes per day	26	30
	(iii) Milk	1977-78	Kg. per year	30	45
X.	**Per Capita**				
	(i) Assets	1971-72	Rs.	12,827	11,311
	(ii) Debts	1971-72	Rs.	725	1,167

Notes: (a) Excluded Assam and Jammu & Kashmir.
(b) Data relate to 1975.
(...) Not available.
Commerce Research Bureau

WHERE THE POOR SHALL PREVAIL

The entire thrust of Maharashtra's effort is on ensuring as far as is humanly possible that the meek shall inherit the earth.

To this end the definition of 'small farmers' has been revised to cover those owning dry land upto six hectares (15 acres) or whose lands are assessed upto Rs. 15. These farmers form the larger part of the State's farming community.

The Sanjay Gandhi Niradhar Anudan Yojana, which takes care of the destitute, and the Sanjay Gandhi Swavalamban Yojana which helps put unemployed youth on their feet, are other facets of this effort. The decision to establish horticultural co-operative estates for landless labourers is yet another.

The unique Hutatma Smarak Scheme inaugurated in Bombay on August 9 to herald the erection of 204 monuments to freedom martyrs all over the State, all but a few of whom were poor, and to give their next of kin financial help, underscores the Government's commitment to the needy, the forgotton and the neglected.

The vigorous implementation of the Prime Minister's 20-Point Programme along with the Government's Five Year Plan, the two of which meet at many points, completes the story of a massive and formidable effort that has the just society as its ultimate aim.

It is appropriate that on this auspicious day we pledge ourselves once again to do our duty by those to whose strivings and sufferings we owe our continued existence — in short, to make Maharashtra a State.

WHERE THE POOR SHALL PREVAIL

Directorate General of Information and Public Relations,
Government of Maharashtra, Mantralaya, Bombay 400 032.

made some piecemeal efforts to see that they get reasonable remuneration and fixed the minimum wages to enable them to get share of agricultural development. But all these things remain mostly on paper. The Government has failed to implement the minimum wages legislation. Big landlords who are influential in the government and political levels have managed to bypass the Act.

The landless and homeless agricultural workers who have been given agricultural land and homestead under the Land Ceiling Act amidst fanfare of official publicity have been mostly forcibly evicted from their homestead and land. So it has been seen that they have been denied their legitimate share of national development and they continue to live in abject poverty and cannot have even one square meal a day.

It is true that the State Government has made arrangements for free education, stipends and hostel accommodation for them but the question is : how many of them avail themselves of the opportunity ? Most of their children are sent to work in fields and houses of landlords from their very childhood. So when the question of earning bread appears to be a big problem any talk of educating and employing them in government offices sounds strange and misleading.

The problem of unemployment remains as acute as it was during the fifties. Besides seasonal unemployment of agricultural workers who migrate to neighbouring states of West Bengal, Assam and Uttar Pradesh there has been steady rise in number of educated unemployed youth during the last 20 years. About 21.69 lakhs are unemployed in the State of them 9.6 lakhs are educated unemployed. About 30,000 women are job-seekers in the State.

Of the workers in Bihar, 43.3 per cent are cultivators and 38.9 per cent are agricultural labourers. Thus 82 per cent of the workers are engaged in agriculture. The corresponding percentage for the entire country is only 69.7 per cent. Only 3.2 per cent of the workers are engaged in trade and commerce and 2.5 per cent in household industries. Manufacturing industries, other than household industries have 2.6 per cent of the total workers.

Job opportunities in small scale and medium industries have further shrunk due to sluggish trend in industrial development. Big and heavy industries are almost running in recurring losses and practically stop fresh recruitment. So the number of people engaged in industrial sector remains the same as it was in 1976. So the contribution of industries to State income dropped to 5.6 per cent only whereas that of agriculture to 38.20 per cent.

In the educational field Bihar has a very shameful record with literacy rate of 20.3 per cent only. During the last 10 years from 1971 to 1981 progress of education has been a dismal one. The rate of literacy went up by only 2 per cent from 19.2 per cent in 1971 to 20.3 per cent in 1981. In spite of free and adult education, facilities, distribution of free books and copies among the poor and backward students, enrolment in this age group of 6-11 and 11-14 is still very low. The enrolment of boys and girls in the age-group of 6-11 has risen only to 38.16 lakhs and 14.20 lakh in 1979-80 from 36.16 and 13.20 lakh in 1975-76.

Although the State Government has made available facilities of primary education within a radius of 1.5 km and middle level education within the radius of 5 km and opened many new schools with free accommodation facilities in hostel for *Adivasis* and other backward classes students. The number of students coming to avail of these opportunities is not encouraging at all, particularly in the areas of Chotanagpur and Santhal Parganas. The State Government has stepped up number of scholarship from 2,480 in 1976 to 4,000 and the monthly rate has also been enhanced from Rs 10 to Rs 15.

At present there are 60,508 primary schools and 12,000 middle schools with and total number of students of 65 lakhs in Bihar. Expenditure per student on primary education in government schools is only Rs 200. But the state of health of these schools is highly unsatisfactory. About 35 per cent of the primary schools have no buildings at all. The number of teachers in proportion to students is not adequate. Quality and standard of education has also gone down. There are large scale complaints against teachers for not holding classes regularly and finishing the syllabus which has resulted in higher percentage of failures in examination. Reports of adopting large scale unfair means by students in examination have been received from different parts of the State.

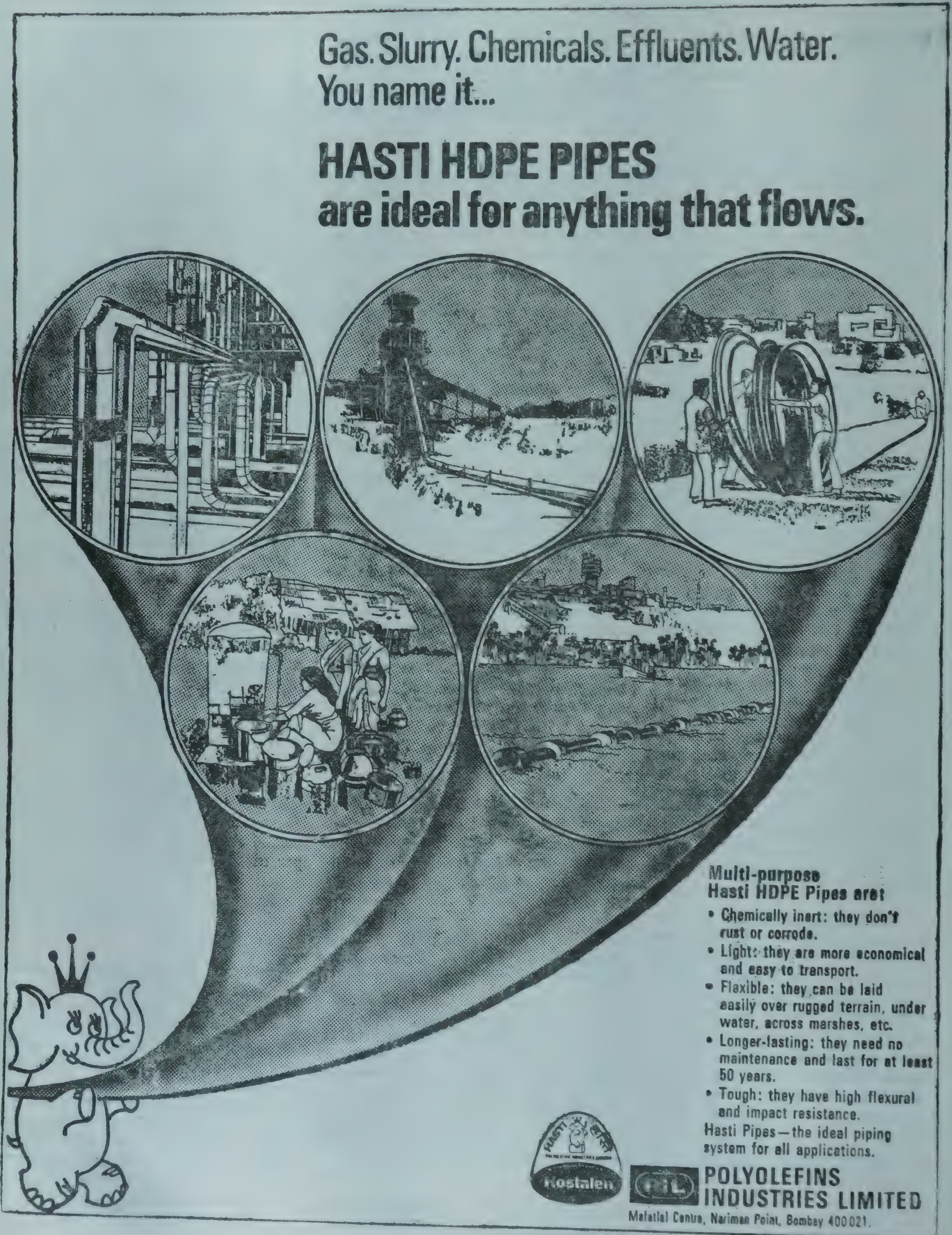
Health is still a neglected sector. Per capita expenditure on health is Rs 5 only. No doubt number of hospitals and dispensaries, health centres and sub-centres has gone up but the quality of services rendered by them is very poor. Most of the hospitals, dispensaries and health centres run short of staff, nurses and doctors. The number of beds is also limited. The quality of diets is not up to mark although the Government has assured to supply better diet. Recently Dr Umeshwar Prasad Varma, Minister for Health and Family Planning, has announced on the floor of the Assembly that the Government would bear the entire cost of treatment of patients admitted to the emergency wards of hospitals.

Mostly patients have to buy medicines from market as the hospitals do not supply them. Not to speak of costly life-saving drugs, even ordinary medicines are not available in hospitals. The health services in the State are in total disarray. It seems there is none to look after them. There are so many complaints that patients often do not get proper care and treatment and as a result they die in many cases. Medicines meant for the patients are sold in the market and consequently poor patients are the worst sufferers.

The problem of housing has aggravated further due to steady increase in population and slower pace of housing construction because of shortage of cement, higher cost of construction materials and difficulties in availability of loan from housing board and other financial institutions.

At present there are 150.27 lakh households in Bihar where as only 98.4 lakh residential houses are available. Then there is a shortage of 52 lakhs residential houses. In urban areas about 25 per cent dwellings are *kutcha* of which 10 per cent have walls and roofs of grass, leaves, reeds. In rural areas, over 70 per cent dwelling units have mud-walls and tile and reeds roofs.

Housing problem in urban areas has become all the more acute due to steady influx of people from rural areas. The Bihar State Housing Board which is in charge of building houses, and flats in 16 towns of the State, has totally failed to cope with the rising demand. Over two lakh applications are pending in different offices of boards for houses and plots. This sharp demand for houses has pushed up the rents to unexpected heights. The problem is such that even for two room flats a rent of over Rs 250 is charged even in small towns.



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GUJARAT

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From A SPECIAL CORRESPONDENT

AHMEDABAD

AS in other parts of India, Gujarat has its quota and classification dividing the community into the haves and the have-nots. Gujarat is not among the most economically backward areas even though the long *Adivasi* belt stretching from Saputara to Sabarkantha provides an appaling spectre of poverty and backwardness. An overall view of the State, however, indicates that there has been improvement in the quality of life both in urban and rural areas.

The terylene shirts, flamboyant trousers and transistors are becoming part of the village scene even as the bright dwellings, throngs at cinema houses and packed restaurants provide the changing spectacle in urban areas.

The consumption of foodgrains has increased, indicating better levels of income. There has been even a slight change in the food habits in the sense that consumption of wheat and jowar has increased more than the consumption of inferior grains, indicating thereby that larger number of people have been able to afford better intake. Men and women in tattered clothes are still seen but fewer than 10 years ago, certainly far fewer than 30 years ago. This is true both of the urban and rural areas. Women and children are not yet the privileged class they ought to be but they certainly are better cared for than what they have experienced so far. The vast growing network of health services and social welfare, along with development in other spheres, have put more money in the pockets of people and improved the coverage and quality of services.

The population of Gujarat increased from 2.67 crores in 1971 to 3.40 crores in 1981—an increase of 27 per cent during the decade. In 1981, 2.34 crores of people were living in rural areas and 1.06 crores of people in urban areas.

The total domestic product of the State rose from Rs 2,189 crores in 1970-71 to Rs 5,210 crores in 1979-80 at current prices and from Rs 2,189 crores in 1970-71 to Rs 2,741 crores in 1979-80 at the 1970-71 prices. The per capita income of Gujarat near doubled from Rs 829 in 1970-71 to Rs 1,623, in 1979-80 at current prices but only from Rs 829

Some selected indicators of levels of living: Gujarat

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	206	340	4,392	6,838
	Rural population					
	(i) Lakhs		153	234	3,603	5020(a)
	(ii) As per cent of total population		74.2	68.9	82.0	76.3(a)
II.	**Literacy** ..	Per cent	36.2	43.8	28.3	36.2
	(a) Males	Per cent	48.7	54.5	40.4	46.7
	(b) Females	Per cent	22.8	32.3	15.3	24.9
	Rural literacy	Per cent	...	28.3 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	38.9 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	17.2 (1971)	...	132.2 (1971)
	Urban literacy	Per cent	...	54.9 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	64.0 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	44.8 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	84	1,805
	Percentage of working force to total population	1971	Per cent	31.4	32.9
	Percentage to total working force..	1971	Per cent		
	(i) Agricultural labourers ..			22.5	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.0	2.4
	(iii) Industry			13.8	11.2
	(iv) Others			61.7	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	121.3	3,046.1
	(a) Rural	1977-78	Lakhs	94.8	2,527.7
	(b) Urban	1977-78	Lakhs	26.5	518.4
	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	39.0	48.1
	(a) Rural	1977-78	Per cent	43.2	50.8
	(b) Urban	1977-78	Per cent	29.0	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	470	16,200
	Educated unemployed	June 30, 1980	'000 number	259.2	7,297.0
VII.	**State/National income** (at current prices)	1977-78	Rs crores	4,473	76,330
	Per capita State/National income (at current prices)	1977-78	Rs.	1,452	1,210
	Rate of growth of per capita State income (at 1970-71 prices) ..	Between 1970-71 and 1977-78	Per cent	0.7	1.5
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1976-77	Per cent		
	(i) Agriculture and animal husbandry			34.2	39.8
	(ii) Manufacturing			18.2	15.7
	(iii) Public administration and other services			15.0	10.2
VIII	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	73.4	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	326	384
	(ii) Pulses	1979-80	Grammes per day	17	30
	(iii) Milk	1977-78	Kg. per year	68	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	12,874	11,311
	(ii) Debts	1971-72	Rs.	1,953	1,167

Note: (b) Exclude Assam and Jammu & Kashmir. (...) Not available

Commerce Research Bureau

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in 1970-71 to Rs 854, in 1979-80 at the 1970-71 prices. The population living below the poverty line was 121.3 lakhs or 39 per cent of the total population of the State in 1977-78. The proportion of people living below the poverty line was 43.2 per cent for rural areas and 29 per cent for urban areas. However, the proportion of 39 per cent of the population of the State below the poverty line was lower than that of 48.1 per cent for the entire country. It should be noted that the poverty line is defined at Rs 65 per capita per month of consumption expenditure at 1977-78 prices corresponding to the minimum daily calorie requirement of 2,400 per person in rural areas and that of Rs 75 corresponding to the calorie requirement of 2,100 in urban areas.

The State has made considerable progress in the field of industrialisation. The number of registered factories rose from 3,911 in 1960 to 11,059 in 1978 and that of working factories from 3,649 to 9,888. The average number of workers employed in working factories increased from 3.46 lakhs in 1960 to 5.89 lakhs in 1978. The number of small scale units which was 2,169 at the end of 1961 rose to 3,713 at the end of 1979. The number of workers employed in these units increased from 22,427 at end of 1961 to 35,439 at the end of 1979.

Gujarat has about 47.5 lakh hectares of irrigation potential. The extent of irrigation in the State was 7.50 lakh hectares or 7.8 per cent of net sown area in 1961-62, which increased to 12.33 lakh hectares or 12.8 per cent of net sown area in 1976-77. In 1976-77, an area of 7.23 lakh hectares or 58.8 per cent of the total was irrigated by wells and 2.72 lakh hectares or 22.1 per cent by canals. The tubewells irrigated 1.05 lakh hectares or 8.5 per cent of the total and the remaining area was irrigated by othe sources.

The question of drinking water supply to villages continues to be a pressing one in the State of Gujarat. There are 18,275 inhabited villages in the State covering about 72 per cent of the total population in the State, while the remaining 28 per cent of the population is living in 216 towns. Out of the said villages about 3,000 villages were identified as problem villages in the matter of drinking water supply. The amount earmarked as Central assistance for the construction of drinking water supply schemes in 1979-80 and 1980-81 was Rs 127.80 lakhs and Rs 258.50 lakhs respectively. Out of the total 18,275 villages in the State, 9,600 villages, i.e., about 50 per cent of the villages were identified as 'no source' villages. The State Government has given the highest priority to the programme of providing water supply facilities to these villages. Up to the end of 1977-78, 2,916 'no source' villages were covered under Rural Water Supply Programme. It is proposed to cover all the remaining 6,684 'no source' villages by the end of the Sixth Five Year Plan—3,284 villages with piped water supply scheme and 3,400 villages with simple wells or tubewells with hand-pumps.

The proportion of literates to the total population in the State during 1981 was 43.8 per cent as against 35.8 per cent in 1971. The literacy rate for males was 54.5 per cent to the total male population and for females, 32.3 per cent of total female population in 1981 as compared to 46.1 per cent and 24.8 per cent, respectively, in 1971. The number of literates went up from 96 lakhs in 1971 to 149 lakhs in 1981. In

Continued on page 67

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Government — A Harbinger of Socio-Economic Changes

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HARYANA

Flourishing villages

From **PRAKASH ANAND**

CHANDIGARH

THE tiny and young State of Haryana, hardly 15 years old, has undergone a dramatic and highly creditable socio-economic transformation as a result of which its per capita income has gone up to Rs 537 (at 1960-61 prices) and Rs 1,776 (at current prices), next only to that of Punjab. When the State was created on November 1, 1966, most of the districts presented a picture of unbearable poverty and prolonged neglect. Much of the land was barren, with the traditionally backward people leading a life of intense hardship.

But both rural and urban areas of the State now show almost all the signs of prosperity and well-being. The sea change in the standard of living, though not as impressive as in the neighbouring and parent State of Punjab, attracts the notice of all visitors. Southern Haryana shares a common border with Delhi, and VIPs are occassionally brought to some of this State's flourishing model villages to show outsiders what perseverance, all-round economic development and systematically planned government assistance can do to make the life of the people, both men and women, happier, brighter and more purposeful.

The level of living of the people of Haryana was bound to be low when the land yield was poor; the means of irrigation were extremely limited, the farming techniques outdated, the people mostly illiterate, ignorant and backward, and the incomes not enough to feed the family. The emergence of Haryana as an independent political entity and the successive governments' drive to improve the lot of the masses have enabled the people of all categories to live better, eat well, earn more through improved farming techniques and educate their children at one or the other of the large network of schools and colleges. Notable improvements have also been effected in their living standards as a result of the rapid development of industries, the establishment of satellite townships in the industrial region — the Faridabad-Sonepat-Ballabgarh complex, Radio sets are

Some selected indicators of levels of living: Haryana

	indicator	Unit	State/Union Territry 1961	State/Union Territry 1981	All-India 1961	All-India 1981
I.	**Population**	Lakhs	76	129	4,392	6,838
	Rural population					
	(i) Lakhs		63	100	3,603	5,020(a)
	(ii) As per cent of total population		82.8	78.0	82.0	76.3(a)
II.	**Literacy**	Per cent	24.1	35.8	28.3	36.2
	(a) Males	Per cent	35.1	47.8	40,4	46.7
	(b) Females	Per cent	11.3	22.2	15.3	24.9
	Rural literacy	Per cent	...	21.7 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	32.6 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	9.2 (1971)	...	13.2 (1971)
	Urban literacy	Per cent	...	51.0 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	59.1 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	41.5 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III	**Occupational Classification**				
	Working population	1971	Lakhs	27	1.805
	Percentage of working force to total population	1971	Per cent	26.4	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			16.2	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			1.4	2.4
	(iii) Industry			12.0	11.2
	(iv) Others			70.4	60.1
IV.	Population below poverty line	1977-78	Lakhs	29.1	3,046.1
	(a) Rural	1977-78	Lakhs	22.1	2,527.7
	(b) Urban	1977-78	Lakhs	7.0	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	24.8	48.1
	(a) Rural	1977-78	Per cent	23.3	50.8
	(b) Urban	1977-78	Per cent	31.7	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	Sept, 30, 1980	'000 number	357	16,200
	Educated unemployed	June 30, 1980	'000 number	166.2	7,297.0
VII	**State/National income** (at current prices)	1977-78	Rs. crores	1,904	76,330
	Per capita State/National income (at current prices)	1977-78	Rs	1,600	1 210
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1977-78	Per cent	2.5 (at 1960-61 prices)	1.5
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1976-77	Per cent		
	(i) Agriculture and animal husbandry			54.7	39.8
	(ii) Manufacturing			13.2	15.7
	(iii) Public administration and other services			8.2	10.2
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	72.2	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	1.069	384
	(ii) Pulses	1979-80	Grammes per day	79	30
	(iii) Milk	1977-78	Kg. per year	162	45
X	**Per capita**				
	(i) Assets	1971-72	Rs.	27,136	11,311
	(ii) Debts	1971-72	Rs	2,616	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir
(...) Not available

Commerce Research Bureau

A HELPING HAND TO THE WEAKER SECTIONS

Andhra Pradesh is in the forefront of implementing Prime Minister Smt. Indira Gandhi's 20 Point Economic Programme. As part of the programme, many outstanding schemes for the welfare of the weaker sections are implemented in recent years.

Some highlights of the welfare measures:

❉ Distribution of surplus lands:
74,062 Scheduled Castes—1.05 lakh acres
24,371 Scheduled Tribes—39.9 thousand acres
40, 871 Backward Classes—58.7 thousand acres

❉ Distribution of Government lands:
4,63,672 weaker sections people—8.11 lakh acres

❉ House sites distributed to 12 lakh poor most of them belonging to weaker sections.

❉ 12,701 bonded labourers freed and 5.800 rehabilitated so far.

❉ Enforcement of minimum wages to farm labourers, a majority belonging to the weaker sections.

❉ Reservations for backward classes in recruitment to Government jobs extended for another ten years.

❉ Incentives for inter-caste marriages being implemented

The under privileged in Andhra Pradesh are evincing a sense of enthusiasm today. They look forward to even a better and brighter future.

No. 27 DIPR

becoming common, and so also many consumer articles associated with urban life.

When the villages were isolated, no improvements in the style of living were possible. Now all villages have been linked with metalled roads, ushering in an era of modernisation and sustained progress. The numerous bridges and overbridges have reduced distances and facilitated a quicker tempo of the movement of agricultural produce to the markets. The much larger returns from the sale of farm produce have naturally led to a better standard of living even among petty peasants.

For the most part, the people of Haryana, except the prosperous section of industrialists in Faridabad and Sonepat, still lead a simple life. The average peasant wears the traditional *dhoti* and *kurta*, the typical Haryanvi Jat turban and the old type of *jooti* (shoes). He does not relish urban standards. The vast majority of the people are petty farmers owning small holdings. Even now, there is more of traditionalism than of modernism in the rural people's living styles.

Haryana differs from Punjab in respect of the drinking habit also. While in Punjab drinking is popular in the countryside and those who avoid liquor form a small minority, in Haryana the number of liquor vends in the rural areas is only 270 against about 1,000 in the entire State. The bulk of the country liquor and India-made foreign liquor (IMFL) is consumed in urban and industrial areas, and its consumption in villages, except those situated on the Haryana-Punjab border, is much less. But the total consumption of liquor in the State is increasing; the quota has been raised from 53 lakh proof litres last year to over 70 lakh proof litres in the current year.

Even though the rural population of both Punjab and Haryana consists mostly of Jats, there is a notable difference which explains the contrast in their living styles. The Sikh Jat is happy go lucky, prosperous, fond of meat and drink and robust. Haryana's Hindu Jat is docile, mostly vegetarian and not fond of liquor, but strong and sturdy all the same. Though there has been a distinct improvement in the level of living in Haryana's countryside, the Haryana tradition continues in most places. The clothes worn, except by the educated youth, are of coarse cloth and the shoes are also of the old style. Modernism has not yet affected most districts of this State.

Haryana is also relatively backward in respect of the number of motor vehicles. Most people still prefer the cart and the bus. This is proved by the fact that the number of motor vehicles per lakh of population in Haryana is low (only 460) against Punjab's corresponding figure of 1,292 and Maharashtra's 920. Similarly, the number of motor vehicles per 100 sq km of area in Haryana (1971 census) is 104 against Punjab's figure of 348, the all-India average being 82.

The attractions of urban life and the greater employment opportunities have prompted many people living in the countryside, especially those in the vicinity of towns, to shift, as far as possible, to urban centres. Though the overall growth rate of population growth in Haryana during the 1971-81 decade was only 28.04 per cent, the urban population has grown more than twice as much — 59.16 per cent.

The women of Haryana have throughout played an important role in the *green* and *white* (milk) revolutions in the State; they share the work with men folk in agricultural, pastoral and other work. They are hard-working and active. A Haryanavi woman's work, it is said, is never finished. They are traditionally joyous and brave; they have combined tradition with modernity during the past 15 years or so since Haryana became an independent political entity. They help greatly to keep the State's festivals and festivities alive. By and large, they are comely and vivacious; they are known for songs and dance on every appropriate occasion — welcoming new seasons, marking ploughing and harvesting, and the onset of the rains.

The typical Haryana woman is fond of ornaments. Women belonging to conservative prosperous families often wear silver ornaments weighing about two kg — around the neck, on the arms, on ankles and legs. The upper middle class women in urban areas wear gold bangles and *Gajra* around the wrist.

The consumption of milk in Haryana is perhaps the highest. Although Haryana constitutes only 1 per cent of the country's total geographical area, it possesses 2.79 per cent of India's cattle and buffaloes and contributes 6.5 per cent to the country's milk pail. The daily availability and consumption of milk is a little over 500 grams. Most people are fond of milk and milk products.

According to the National Sample Survey, 45 per cent of the population in the rural areas lived below the poverty line in 1973-74. The position improved by 1978-79 when this percentage fell to 38 per cent. Since the acceleration in the pace of development activities, the linking of over 90 per cent of the villages by metalled roads and the hundred per cent electrification of the villages (in which Haryana took the lead in the country), there has been a distinct improvement in the level of living of the people. The per capita electricity consumption has increased sharply — from 57 units in 1976-77 to 200 units in 1978-79. The living standards has risen almost proportionately.

With the Integrated Rural Development Programme, which has been extended to all blocks in the State, a further improvement following the reduction in the unemployment has been noticed. According to the present plans, over 2.7 lakh more families will be brought above the poverty line by March, 1985.

Thus further improvements in the level of living of the rural people is expected as a result of the special emphasis being laid by the Government on the uplift of the weaker sections, small farmers and farm labourers.

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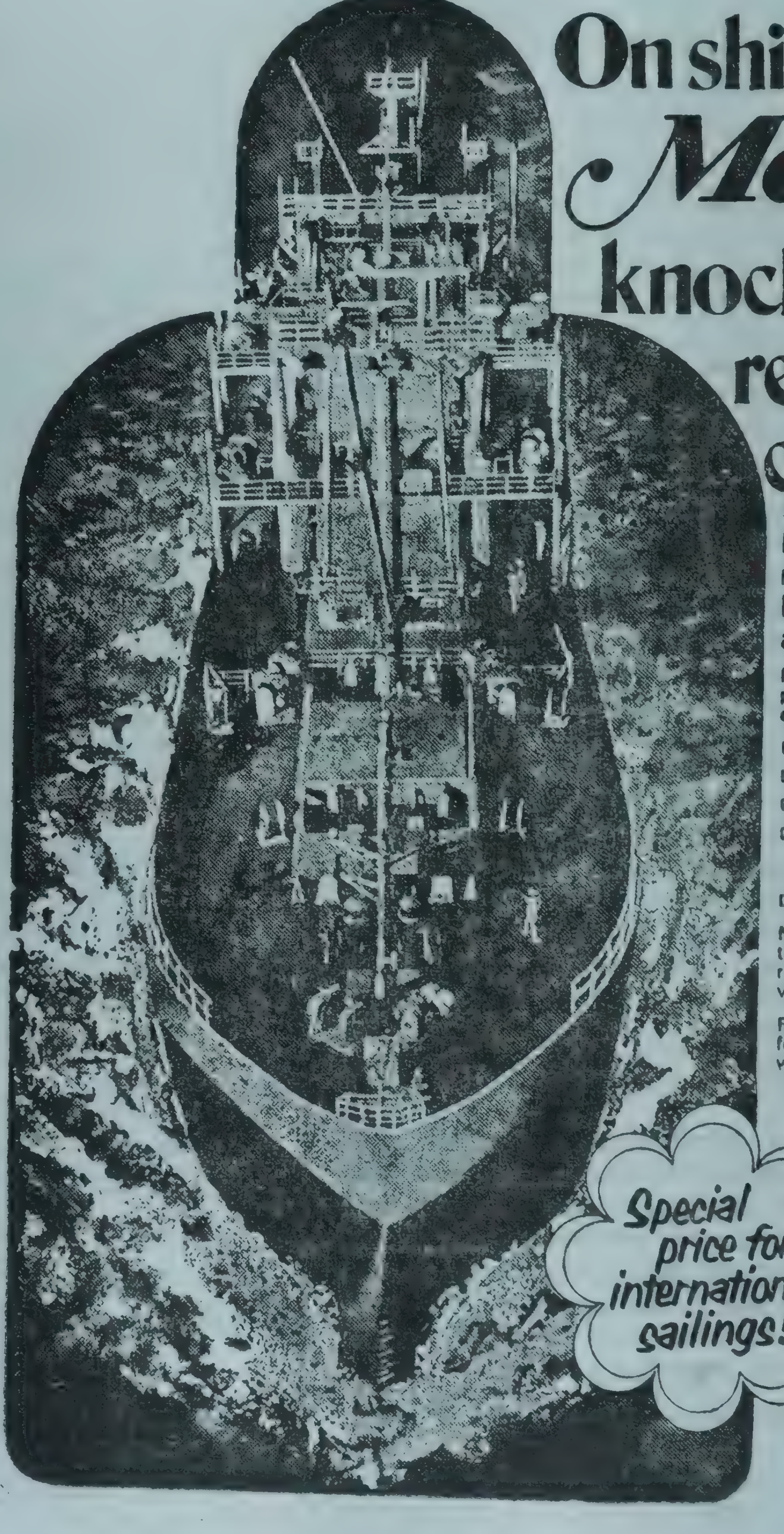

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HIMACHAL PRADESH

Small landholders predominate

From A SPECIAL CORRESPONDENT

SIMLA

THE position of Himachal Pradesh as regards the proportion of people below the poverty line could be considered far better when compared with other states of India. According to the official estimates, 10.88 lakh people or 27.2 per cent in Himachal Pradesh were living below the poverty line in 1977-78. Those with per capita monthly consumption expenditure of Rs 65 or less (at 1977-78 prices) corresponding to calorie requirement of 2,400 per person per day in rural areas and per capita monthly consumption expenditure of Rs 75 or less (calorie requirement of 2,100 per person per day) are regarded as people below the poverty line. Out of 10.88 lakh people living below poverty line 10.37 lakhs or 28.1 per cent were in rural areas while only 51,000 or 16.6 per cent were in urban areas. The percentage of population living below the poverty line in Himachal Pradesh at 27.2 was the third lowest among the states after Punjab (15.1 per cent) and Haryana (24.8 per cent).

The net domestic product (at current prices) of Himachal Pradesh between 1970-71 and 1979-80 increased from Rs 232.4 crores to Rs 542.3 crores registering a compound growth rate of 9.9 per cent per annum. During the same period the per capita income (at current prices) went up from Rs 678 to Rs 1,317 or at a rate of 7.7 per cent per annum. However, the comparison of data on State income and per capita income in real terms or at constant prices (1970-71 prices) present a very much different picture. Although, there has been an increase in absolute terms in both real State income and per capita income, the growth rates registered by these two categories under constant prices are much lower than those obtained at current prices. The real State income increased from Rs 232.4 crores in 1970-71 to Rs 283.4 crores in 1979-80 or at a rate of 2.2 per cent per annum. Similarly the real per capita income grew from Rs 678 to Rs 688 showing a growth rate of a meagre 0.2 per cent per annum.

The population of Himachal Pradesh increased from 34.60 lakhs in 1971 to 42.38 lakhs in 1981 showing a growth rate of 22.5 per cent for the decade 1971-81. During this decade there has not been much change in the degree of urbanisation and the State continues to

Some selected indicators of levels of living: Himachal Pradesh

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I	**Population**	Lakhs	28	42	4,392	6,838
	Rural population					
	(i) Lakhs		26	39	3,603	5,020(a)
	(ii) As per cent of total population		93 7	92 3	82.0	76.3(a)
II.	**Literacy**	Per cent	24.9	41.9	28.3	36.2
	(a) Males	Per cent	37.6	52.4	40.4	46.7
	(b) Females	Per cent	11.2	31.4	15.3	24.9
	Rural literacy	Per cent	...	29.8 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	41.2 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	18.2 (1971)	...	13.2 (1971)
	Urban literacy	Pe cent	...	60.5 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	66.8 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	52.2 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III	**Occuptaion I Classification**				
	Working population	1971	Lakhs	13	18 08
	Percentage of working force to total population	1971	Per cent	36.9	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			4.1	26.3
	(ii) Livestock, foresty, fishing, plantations etc			2.7	2.4
	(iii) Industy			8.0	11.2
	(iv) Others			85.2	60.1
IV.	Population below poverty line	1977-78	Lakhs	10.9	3,046.1
	(a) Rural	1977-78	Lakhs	10.4	2 527.7
	(b) Uban	1977-78	Lakhs	0.5	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	27.2	48.1
	(a) Rural	1977-78	Per cent	28.1	50.8
	(b) Urban	1977-78	Per cent	16.6	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	September 30 1980	'000 number	141	16,200
	Educated unemployed	June 30, 1980	'000 number	68.6	7,297.0
VII	**State/National income** (at current prices)	1979-80	Rs. crores	542	90,374
	Per capita State/National income (at current prices)	1979-80	Rs.	1,317	1,379
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1979-80	Per cent	0.2	0.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculutre and animal husbandry			48.1	40.5
	(ii) Manufacturing			5.9	15.2
	(iii) Public administration and other services			13.8	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December end 1977	Number	121.1	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	544	384
	(ii) Pulses	1979-80	Grammes per day	30	30
	(iii) Milk	1977-78	Kg. per year	76	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	22,667	11,311
	(ii) Debts	1971-72	Rs.	1,527	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir
(...) Not available

Commerce Reseach Bureau

be predominantly rural. The urban population of Himachal Pradesh increased from 2.47 lakhs or 7.0 per cent of the total population in 1971 to 3.27 lakhs or 7.7 per cent in 1981. On the other hand, even as the percentage of rural population declined from 93.0 to 92.3 the number of people living in rural areas has gone up from 32.18 lakhs to 39.11 lakhs during this decade. This shows that there has been no significant outflow from rural areas to urban areas like in many other parts of the country. Thus, it appears that a larger number of people are able to find their livelihood in villages.

A bulk of the total work force in Himachal Pradesh continues to live on agriculture. The percentage of cultivators to total work force has gone down from 70.6 in 1971 to 69.4 in 1981. In the case of agricultural labourers there has been substantial decline—from 4.2 per cent in 1971 to 2.9 per cent in 1981.

Unlike many other states, in Himachal Pradesh small landholders is a dominant class both in terms of number and the area. According to the Agricultural Census, there has been no significant change in the shares of small landholders and large farmers in the number and area during the period 1970-71 and 1976-77. In 1970-71 there were 6.09 lakh holdings of which 4.8 lakhs were small (*i.e.,* having land size less than two hectares) and only 6,700 were large holdings (*i.e.,* having area of ten hectares and above). While the small holdings constituted almost 79 per cent of the total holdings, large holdings accounted for barely one per cent. As regards area, the total area under operation was 9.30 lakh hectares of which about 34 per cent was under small holdings and 17 per cent under large holdings. This has not changed much in 1976-77 in that the share of small holdings in number and area was 77 per cent and 34 per cent respectively while that of large holdings was one per cent and 16 per cent respectively.

Under the land ceilings laws in force in the State, an area of 38,021 hectares was declared surplus of which possession was taken of 37,145 hectares so far. However, on the distribution side the performance was very poor as only 1,932 hectares of land was distributed among 6,921 landless people.

During the past several years educational facilities have improved to a large extent. The percentage of literates to total population increased from 32.0 per cent in 1971 to 41.9 per cent in 1981 which is quite higher than the all-India literacy figure of about 36 per cent. In the field of general education the percentage of enrolment to total population in the age group 6-11 year has gone up from 90 in 1974-75 to 110 in 1979 and in the 11-14 age group from 54 to 61. During the Fifth Five Year Plan the system of part-time education at the elementary stage was introduced on an experimental basis and 20,100 children in the age group 6-14 years were enrolled under this system. In an effort to enrol and retain maximum number of children at the elementary stage, various incentives like free text books, free stationery, free clothing, attendance scholarships etc were offered. Under social education, 600 centres were opened for adult education during 1974-78 covering 24,500 adults.

During the Sixth Five Year Plan (1980-85) the main emphasis in the field of general education would be on consolidation rather than expansion, excepting provision of facilities for education of children in the age group 6-14 years. The main direction of development of education during the Plan period would be: accelerating the process of modernisation, development of human resources, increasing access to education and improving the quality of education.

The medical facilities in the State over the years have shown improvement. The number of medical institutions—hospitals, primary health centres, allopathic dispensaries, ayurvedic dispensaries—has gone up from 482 in 1967 to 712 in 1979. Thus the ratio of medical institutions to population in the State has shown an increase from 15 institutions per lakh population in 1967 to 17 institutions per lakh of population in 1979. The number of hospital beds during the same period has risen from 4,649 to 5,524.

As regards provision of safe drinking water to rural areas, there were 11,137 problem villages in the State as on March 31, 1974. By the end of March 1980, 3,322 villages were provided with safe drinking water facilities. During the Sixth Plan, the balance 7,815 problem villages would be covered.

The Integrated Rural Development Programme (IRDP) was started in Himachal Pradesh during 1978-79 in 29 blocks, with the main objective of bringing an appreciable rise in standard of living of the poorest sections of the society as also providing them with fuller employment opportunities. Since October 2, 1980, all the 69 blocks in the State have been covered under the Programme. During the Sixth Five Year Plan (1980-85) about 1.77 lakh families are proposed to be brought under this Programme. These small farmer beneficiaries are given subsidy of 25 per cent whereas marginal farmers and agricultural labourers get 33.3 per cent subsidy. The scheduled caste beneficiaries get 50 per cent assistance as subsidy.

The State Government has introduced a programme for the training of rural youths for self employment. Under this programme, which is a part of the IRDP, youths up to 35 years of age are given training to acquire skills to establish themselves. A minimum of 40 unemployed youths in each block are imparted training in various trades. About 1,800 beneficiaries were undergoing training in various trades during 1980-81. After completion of the training, the youth get loan and subsidy to establish themselves in the vocation of their training.

Madhya Pradesh : Deterioration in rural areas

Concluded from page 43

tricts of the State. Under the nutrition programme, mid-day meals are provided to school going children in the age group 6-14 for 250 days in a year. The special nutrition programme provides for supplementary nutrition to children and expectant and nursing mothers in the tribal areas to the extent of 300 calories and 10-14 grams of protein per day per beneficiary for 300 days in a year. The number of beneficiaries under the programme since then has gone up from three lakh to 14.23 lakhs in 1979-80. During 1980-81, it was proposed to cover about eight lakh beneficiaries each under the mid-day meals programme and the special nutrition programme. By the end of the Sixth Plan the coverage of beneficiaries would be about 12 lakhs under the mid-day meals and 10 lakhs under the special nutrition programme.

Supply of safe drinking water to people is of utmost importance. The problem of inadequate drinking water supply is more acute in villages than in tonnes. Out of 70,883 inhabited villages in Madhya Pradesh, 32,792 villages were declared as problem villages up to March 31, 1980 out of nearly 50,000 villages which were surveyed. Under the minimum needs programme of the Sixth Plan it is proposed to provide safe drinking water to all the remaining problem villages as also to provide at least one public drinking water well in each hamlet.

JAMMU & KASHMIR

Higher levels of consumption

From O. N. KOUL

Srinagar

Some Selected Indicators of levels of Living: Jammu & Kashmir

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	36	60	4,392	6,838
	Rural population					
	(i) Lakhs		30	..	3,603	5,020(a)
	(ii) As per cent of total population		83.3	..	82.0	76.3 (a)
II	**Literacy**	Per cent	13.0	..	28.3	36.2
	(a) Males	Per cent	19.8	..	40.4	46.7
	(b) Females	Per cent	5.1	..	15.3	24.9
	Rural literacy	Per cent	...	14.1 (1971)	...	23.7 (1971)
	(a) Males	Per cent	...	22.2 (1971)	...	33.8 (1971)
	(b) Females	Per cent	...	5.0 (1971)	...	13.2 (1971)
	Urban literacy	Per cent	...	38.2 (1971)	...	52.4 (1971)
	(a) Males	Per cent	...	46.6 (1971)	...	61.3 (1971)
	(b) Females	Per cent	...	28.4 (1971)	...	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	14	1 805
	Percentage of working force to total population	1971	Per cent	29.8	32 9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			3.1	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			3.6	2.4
	(iii) Industry			9.2	11.2
	(iv) Others			84.1	60.1
IV.	Population below poverty line	1977-78	Lakhs	18.9	3,046.1
	(a) Rural	1977-78	Lakhs	14.6	2,527.7
	(b) Urban	1977-78	Lakhs	4.3	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	34.1	48.1
	(a) Rural	1977-78	Per cent	32.8	50.8
	(b) Urban	1977-78	Per cent	39.3	18.2
VI.	**Unemployment** (Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	51	16.200
	Educated unemployed	June 30, 1980	'000 number	19.8	7,297.0
VII.	**State/National income** (at current prices)	1978-79	Rs. crores	641	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	1,145	1,267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	3.1 (at 1960-61 prices)	1.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			46.7	40.5
	(ii) Manufacturing			6.7	15.2
	(iii) Public administration and other services			10.8	9.8
VIII	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	94.8	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	509	384
	(ii) Pulses	1979-80	Grammes per day	14	30
	(iii) Milk	1977-78	Kg. per year	56	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	15,251	11,311
	(ii) Debts	1971-72	Rs.	749	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir.
(...) Not available

Commerce Research Bureau

IF per capita consumption of cereals which stood at about 700 gm per day in Jammu and Kashmir against only 428 gm in the country as a whole in 1977-78 is any guide, the level of living in the State would appear to be quite high in comparison with other states. True, consumption of pulses was as low as 19 gm as against national average of 45 gm, but this was and continues to be more than made up by consumption level in the State of mutton and other non-vegetarian foods. Though there are no reliable statistics available in this regard, yet the significant fact is that at least six lakhs head of sheep and goat are imported into the State annually. In terms of current sale rate of mutton in Srinagar its value comes to Rs 12 crores. On the assumption that mutton worth only Rs 24 crores is currently sold in the State, per capita consumption in this regard works out to Rs 1.33 per day which is of no mean order.

A consumption level of such comparatively high order may be made up substantially by class of people who have become rich overnight by fabulous returns from tourism, horticulture and handicraft sectors. But there can be no denying the fact that these sectors account for bulk of employment in urban and semi-urban areas of the State. Not counting clandestine trading in *charas*, stolen idols and precious skins, the tourism sector alone disperses substantial money in the State. It would indeed be worth studying whether Jammu and Kashmir has any problem of unemployment after taking into account also direct emoluments provided by in agricultural sector and government services. The latter alone employs about 1.60 lakh persons. This means that one out of every 40 persons is employed as such. Taking into account other avenues of income, the ratio would be lesser indicating the fact that sufficient incomes are available to sustain a generally higher level of consumption. This is particularly true of Jammu and Kashmir where the menace of concealment of incomes is widespread. Distortions such as these therefore, tend to lend colour of unreality to official statistics regarding the per capita income etc estimated for Jammu and Kashmir of 1978-79 at Rs 1,145 against national average of Rs 1,249. Statistics apart the most discernible fact about Jammu and Kashmir, particularly Kashmir valley, is that levels of consumption have increased progressively at all levels as if in a deliberate attempt to disapprove the generally accepted principle that expenditure on food etc goes down with rise in incomes. The other important discernible fact about Jammu and Kashmir is that “happy valley” has become more akin to Arab states which are deficient in everything except money.

Levels of living in Jammu and Kashmir would have been higher had not a high rate of population growth eaten substantially into officially calculated rate of growth in per capita income of 3.5 per cent during 1970-71 to 1978-79 against the average of 3.1 per cent. During the 1961-71 decade, the State's population increased by over 2.9 per cent per annum against all-India average of 2.4 per cent. During the decade ending 1981 the State's population is estimated to have increased at the same rate as in last decade. That even the high rate of population growth has not adversely affected the level of consumption is by itself significant.

Important indicators of higher level of living in Jammu and Kashmir are that nobody in the State is houseless and the number of landless agricultural labourers is as low as 3.05 per cent of the total working population of 13.74 lakhs against 26.3 per cent at the national level, according to 1971 figures. This is attributable directly to implementation of revolutionary land reforms in 1951 under which absentee landlords were divested of holdings in excess of 18.75 acres without any compensation and tenants given proprietory rights on holdings rendered surplus. Another dose of land reforms is under implementation for the last three years. It aims at bringing about complete peasant proprietorship of land within the new ceiling limit of 12.5 standard acres. Those expected to benefit include landless labourers.

No official figures are available about the number of people living below the poverty line. But it is conceded that the problem is more acute in urban areas than in rural areas. However, if the number of educated unemployed, essentially an urban phenomenon, is any guide, the level of poverty would not appear to be alarming in the State when compared with other parts of the country. A total of about 53,000 unemployed persons occurring on live register in June 1980 included over 37,000 educated persons. Besides refusing to open new degree colleges, the State Government has been curbing additions to ranks of job seekers by diverting young boys and girls to trades like carpet weaving, etc, even before they complete primary education.

However, if the 1981 census figures can be relied upon, the State appears to have made impressive improvement of 41 per cent in the level of literacy during the last decade. Male literacy during this period increased from 26.7 to 35.49 per cent. Female literacy rose faster by 70 per cent from 9.28 to 15.28 per cent. In the words of the State census director, Mr A. H. Khan, Jammu and Kashmir, however, remains “a decade behind” national average of 35.03 per cent in 1981. It remains to be seen when the impressive increases in female literacy during the last decade has also been shared by rural areas where literacy level in 1971 was only five per cent. The picture will become rather clear when detailed figures about the 1981 census are released for Jammu and Kashmir. However, it appears certain that improvement in literacy continues to be a predominantly urban phenomenon.

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KARNATAKA

Progressive improvement

From OUR SPECIAL CORRESPONDENT

BANGALORE

IF the five year plans are recognised as instruments of change and development and that Karnataka has registered an annual growth rate of around six per cent (short-run in real terms between 1970-71 and 1974-75) in its economy, considered one of the highest for the country, this growth can be taken as a measure of the progressive upgradation of the general levels of living of the people. It has been acknowledged that this growth had further strengthened the agricultural, industrial, infrastuctural and institutional base of the State. But certain problems like unemployment and underemployment, low efficiency in certain sectors, underutilisation of capacity and resources, uneven spread of growth benefits and shortfalls in some of the minimum needs of life and nutritional intake continue to persist. There was still heavy reliance on the agricultural sector for employment and income generation.

An inbuilt inhibition that afflicts development and neutralises its gains, from time to time, is the incidence of drought, almost cyclic, bringing distress to large mass of people, particularly, in the primary sector. The irrigation back-up, though having risen to 20 per cent of the total area under cultivation, is still considered low to be of much help in stabilising the agricultural economy.

The State's development since Independence is two-phased, comprising the period between 1948-1956 and the post-1956 period, after the State's reorganisation, bringing in its train new areas from the erstwhile Bombay, Madras, Hyderabad, and Coorg states, with varying degrees of development, not comparable to the better living standards enjoyed by the erstwhile princely state of Mysore. In fact, the striking feature of the new State's career became the chronic regional imbalances in development and living levels. An overview of the scenario should necessarily take these factors into account over the last three decades.

The net state domestic product (state income), at current prices, is expected to increase to Rs 4,796 crores in 1980-81 as against Rs 4,393 crores in the previous year, representing a 9.2 per cent increase. But, at constant prices, it is expected to decrease from Rs 2,503 crores, in 1979-80, to Rs 2,374

Some selected indicators of levels of living: Karnataka

	Indicatoi	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	236	370	4,392	6,838
	Rural population					
	(i) Lakhs		183	263	3,603	5,020(a)
	(ii) As per cent of total population		77.7	71.1	82.00	76.3(a)
II.	**Literacy** ..	Per cent	29.8	38.4	28.3	36.2
	(a) Males	Per cent	42.3	48.6	40.4	46.7
	(b) Females	Per cent	16.7	27.8	15.3	24.9
	Rural literacy	Per cent	20.0	25.1 (1971)	13.3	23.7 (1971)
	(a) Males	Per cent	30.5	35.4 (1971)	20.0	33.8 (1971)
	(b) Females	Per cent	9.2	14.5 (1971)	6.3	13.2 (1971)
	Urban literacy	Per cent	44.2	51.4 (1971)	23.5	52.4 (1971)
	(a) Males	Per cent	55.3	60.4 (1971)	27.2	61.3 (1971)
	(b) Females	Per cent	32.2	41.6 (1971)	9.2	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	102	1,805
	Percentage of working force to total population	1971	Per cent	34.7	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers ..			26.7	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			4.1	2.4
	(iii) Industry			12.5	11.2
	(iv) Others			56.7	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	162.7	3,046.1
	(a) Rural	1977-78	Lakhs	124.1	2,527.7
	(b) Urban	1977-78	Lakhs	38.6	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	48.3	48.1
	(a) Rural	1977-78	Per cent	49.9	50.8
	(b) Urban	1977-78	Per cent	44.00	18.2
VI.	**Unemployment** (Jop seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	597	16,200
	Educated unemployed	June 30, 1980	'000 number	363.3	7,297.0
VII.	**State/National income** (at current prices)	1979-80	Rs. crores	4,393	90,374
	Per capita State/National income (at current prices)	1979-80	Rs.	1,267	1,379
	Rate of growth of per capita State income (at 1970-71 prices) ..	Between 1970-71 and 1979-80	Per cent	0.5	0.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices) ..	1977-78	Per cent		
	(i) Agriculture and animal husbandry			48.6	40.5
	(ii) Manufacturing			11.9	15.2
	(iii) Public administration and other services			7.7	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	94.5	79.0
IX.	**For capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	515	384
	(ii) Pulses	1979-80	Grammes per day	47	30
	(iii) Milk	1977-78	Kg. per year	41	45
	(iv) Edible oils and vanaspati ..	1977-78	Kg. per year	1.26	4.7
	(v) Sugar, gur and khandsari	1977-78	Kg. per year	32.8	80
	(vi) Tea	1977-78	Grammes per year	205	0.2
	(vii) Cotton cloth	1977-78	Metres per year	2.06	2150
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	10,031	11,311
	(ii) Debts	1971-72	Rs.	1,515	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir (...) Not available

Commerce Research Bureau

crores, in 1980-81 or a percentage decrease of 5.2. This trend is attributed o the decline in agricultural producion, because of the widespread drought conditions.

The per capita income, at current prices, works out to Rs 1,357, in 1980-81, as against Rs 1,267, in the previous year. It showed at constant prices, a decrease from Rs 722 to Rs 672. Agriculture continues to contribute a major hare to state income. At current prices, he costribution of the primary sector vas 52.36 per cent, in 1979-80 while hat of the secondary and the tertiary ectors was 21.13 per cent and 26.5 per cent, respectively.

There have been ups and downs in he reckoning. The net domestic product, at current prices, in 1978-79, was Rs 3,866 crores while the per capita ncome was Rs 1,136. The corresponding national income and per capita income, at current prices, was of the order of Rs 81,228 crores and Rs 1,267. While the rate of growth of per capita tate income, at constant prices, between 1970-71 and 1978-79, in Karnaaka, was 0.69 per cent, that of all ndia was 1.87 per cent. During 1978-79, out of the total state domestic product, as much as 46.4 per cent was rom agriculture and the animal husbanlry sector, 13 per cent from the manuacturing sector, the corresponding allndia figures being 37.5 per cent and 6.8 per cent, respectively.

Another trend observed is the fall n the share of area under cereals from 0 per cent to 50 per cent, increase in he share of the area under pulses from 4 per cent to 16 per cent and of the hare of the area under oilseeds from 13 per cent to 16 per cent, indicative of beter coverage of nutritional requirements f the growing population. The per apita availability for consumption per nnum of cereals had increased from 73 kg in 1955-56 to 188 kg in 1979-0, as against the nutritional requirement of 173 kg. Similarly, in respect f sugar and gur, the per capita availbility had risen from eight kg a year 31 kg, though the State was not in n equally advantageous position in espect of pulses and edible oil.

The overall literacy rate increased om 25.4 per cent in 1961 to 31.5 per ent in 1971. The 1981 census reveals jump in the figure to 38.14 per cent ith a break-up of 48.61 per cent for ales and 27.83 per cent for females.

The state of compulsory primary lucation, covering the 6-10 year age roup, has continued to cause anxiety. n spite of the best efforts and incentis, it has been admitted, the enrolent of children in classes I to IV was a little over 35 lakhs, which on paper, means an enrolment percentage of 96. But this number includes children outside the compulsory age group who formed about 10 per cent of the total. It meant that 14 per cent of children in the 6-10 year age group are still outside schools. In classes V to VII, the enrolment has been 46 per cent.

The problem of educated manpower has assumed serious proportions. The stock of all types of graduates was likely to be around five and half lakhs by 1985. Assuming that the present rate of unemployment would hold good in 1984-85, the graduate unemployment, at the rate of more than five per cent a year, was expected to touch 60,000 or more.

The demographic perspective is also noteworthy for employment prospects. According to the 1981 census, the population of the State is put at 370.43 lakhs, made up of 188.69 lakh males and 181.74 lakh females, representing an increase of over 57 per cent over the 1961 figures. In terms of policy implications, it means need for reduction in the birth rate it is realised, from 34 per cent in 1971-75 to 25.1 during 1981-85 and to 20.5 per cent during 1986-90. It could be tackled, among other things, by improving the living standards of the economically weaker sections and by education regarding the benefits of a small family.

According to the 1971 figures of occupational classification, out of tl total population of 292.99 lakhs, 101.79 lakhs or 34.75 per cent constituted the working population, dependents forming 65.26 per cent of the total population. Out of the total work force 26.7 per cent constituted agricultural labourers, 4.12 per cent were those in the livestock, forestry, fishing, and plantations, and 10.20 per cent constituted industrial workers.

Growth rate of labour force is expected to be 2.5 per cent per annum, during 1980-85 and slightly less thereafter until 1990. In absolute terms, it is pointed out, the responsibility of the State lay in creating employment opportunities for about 160 lakhs by 1990 as against the present work force of about 112 lakhs. The expected labour force in the rural segment was 117 lakhs while it was 43 lakhs for the urban sector.

The live registers maintained by employment exchanges showed that at the end of 1977, the number of unemployed was of the order of 4.98 lakh of which 2.98 lakh were educated unemployed. The figure rose to 5.82 lakh by the end of 1980 of whom 3.77 lakh were educated unemployed.

As for the health services available, the latest position was there were 1,869 hospitals and institutions with a bed strength of 34,588. The institution-population ratio and the bed strength population ratio is put at 1:19,420 and 1:1,049, respectively for the 1980 level of population. The bed strength in 1969-70 was about 24,800.

According to the inter-State economic indicators, brought out by the Planning Department, in May, 1980, the physical quality of life figures put infant mortality in Karnataka at 100.27 for 1000 live births: life expectancy at birth at 55.62, and the physical quality of life index at 37.6. Karnataka ranks sixth in the country, after Kerala, the Punjab, Maharashtra, Haryana, and West Bengal.

The per capita electric energy consumption figures indicate a rise from 82 units to 158 units between 1969-70 and 1979-80. Sixtyone per cent of the villages had been electrified as against 35 per cent 10 years ago.

According to the all India Rural Debt and Investment Survey conducted by the Reserve Bank, in 1971-72, the rural indebtedness per reporting household was assessed at Rs 1,515 in Karnataka as against Rs 1,167 for all India.

According to the special studies division of the Planning Department, the population below poverty line is estimated (based on both private consumption expenditure and consumption of public goods) at 48.8 per cent rural and 51.3 per cent urban for 1970-71.

It has been proposed to bring about redistribution of consumption expenditure in such a way that the lower rural class got 38 per cent of rural private consumption expenditure and lower urban class 47 per cent of urban private consumption expenditure by 1987-88.

It would be worthwhile going into the progressive impoverishment of both the urban working class at the lower economic strata and the mass of the weaker sections in the rural segments exposed to the growing incidence of liquor consumption. The recent unprecedented illicit liquor tragedy in Bangalore and its socio-economic dimensions are a pointer. In the public debates that have raged, the darker aspect of public policy highlighted has been the hunger on the part of the government for maximising the 'tainted' excise revenue and its implications for the growth of illicit distillation by the underworld and the deleterious effects on the health and the domestic budget of the victims.

KERALA

Apparent prosperity in midst of poverty

From G. S. KARTHA

TRIVANDRUM

SINCE the formation of Kerala, comprising the princely states of Travancore and Cochin, and the Malabar district of the erstwhile Madras State 25 years ago, successive governments have generally followed a welfare approach towards development. The spread of education and health services started by the princely states was intensified and extended to the comparatively backward Malabar area. The birth of the new state of Kerala also coincided with the coming to power of political parties with progressive ideologies, and those governments gave sympathetic consideration to the needs and demands of organised sections of the people in different spheres.

A full picture with statistics of the progress made in the area now known as Kerala since Independence is not readily available, due to various reasons, because different policies and programmes were followed in the princely states of Travancore and Cochin until the State of Kerala was formed. However, over the years, several welfare measures for the various sections of the people were initiated as a result of which considerable progress was achieved in education, health services, literacy, and employment, and in the sphere of education and literacy Kerala stands foremost in the country. But proper official statistics to highlight the changes that have taken place since Independence are not easily available, covering the three decades.

Rapid strides were made in industry, agriculture, and the social services, even though the progress was not entirely satisfactory. Though the successive governments indulged in tall declarations of policies, the performance remained comparatively poor, because of the too-much of involvement in party politics by the rulers, and the lack of adequate support and co-operation from the Centre — the more so when non-Congress governments were in office in the State.

Low economic growth in the context of a growing population and the turnout of educated people every year from schools and colleges, has aggravated the already acute problem of unemployment, and has resulted in low family incomes and correspondingly low private consumption even as regards essential goods.

Some selected indicators of levels of li.ing : Kerala

&ndicat	UWit	State/Union Territory 1961	State/Union Territory 1981	All-India 1961	All-India 1981
I. **Population**	Lakhs	169	254	4,392	6,838
Rural population ..					
(i) Lakhs		143	206	3,603	5,020(a)
(ii) As aer cent of total population		84.9	81.3	82.0	76.3(a)
II. **Literacy**	Per cent	55.1	69.2	2 .3	36.2
(a) Males..	Per cent	64.9	74.0	40.4	46.7
(b) Females	Per cent	45.6	64.5	15.3	24.9
Rural literacy	Per cent	..	59.3(1971)	..	23.7(1971)
(a) Males..	Per cent	..	65.6(1971)	..	33.8(1971)
(b) Females	Per cent	..	53.1(1971)	..	13.2(1971)
Urban literacy	Per cent	..	66.3(1971)	..	52.4(1971)
(a) Males..	Per cent	..	72.0(1971)	..	61.3(1971)
(b) Females	Per cent	..	60.6(1971)	..	42.1(1971)

Indicator	Reference year	Unit	State/Union Territory	All-India
III. **Occupational Clessification**				
Working population	1971	cakhs	62	1,805
Percentaae of working force to total population	1971	Per cent	29.1	32.9
Percentage to total working force	1971	Per cent		
(i) Agricultural labourers			30.7	26.3
(ii) Livestock, forestry, fishing, plantations etc.			7.0	2.4
(iii) Industry			18.0	11.2
(iv) Others			44.3	60.1
IV. Popujation below poverty line ..	1977-78	Lakhs	115.6	3,046.1
(a) Rural	1977-78	Lakhs	93.4	2,527.7
(b) Urban	1977-78	Lakhs	22.2	518.4
V. Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	47.0	48.1
(a) Rural	1977-78	Per cent	46.0	50.8
(b) Urban	1977-78	Per cent	51.4	18.2
VI. **Unemployment**(Job seekers registered with employment exchange)				
Unemployed persons	Sept. 30, 1980	'000 number	1,579	16,200
Educated unemployed	June 30, 1980	'000 number	710.9	7,297.0
VII. **State/National income**(at current prices)	1977-78	Rs. crores	2,404	76,330
Per capita State/National income (at current prices)	1977-78	Rs.	987	1,210
Rate of grwoth of per capita State income (at 1970-71 prices)	1970-71 and 1977-78	Per cent	-0.2	1.5
Structure of State/National income at current prices				
Share in State/National deomestic product (at current prices)	1976-77	Per cent		
(i) Agriculture and animal husbandry			43.8	39.8
(ii) Manufacturing			9.2	15.7
(iii) Public administration and other services			14.3	10.2
VIII. **Health**				
Number of hospital beds per '000 population	December-end 1977	Number	198.7	79.0
IX. **Per capita availability of:**				
(i) Cereals	1979-80	Grammes per day	140	384
(ii) Pulses	1979-80	Grammes per day	2	30
(iii) Milk	1977-78	K & per year	34	45
X. **Per capita**				
(i) Assets	1971-72	Rs.	11,615	11,311
(ii) Debts	1971-72	Rs.	1,068	1,167

Notes (a) Excludes Assam and Jammu & Kashmir
(..) Not available

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TRIKAYA-MT 20·81

A study conducted in the State, adopting poverty norms suggested by the Planning Commission, (minimum nutritional requirements of 2,400 calories per person per day in rural areas and 2,100 calories per person per day in urban areas) revealed that about 68 per cent of the people in the rural areas and 78 per cent in urban areas were living below the poverty line. Though there is poverty, it is doubtful if there is actual starvation — instances of people dying due to starvation. If there were such conditions, the highly class-conscious, militant, and irrepressible people would have risen in revolt, especially when the State is a stronghold of the Marxists, and parties of other leftist ideologies. As a professor said, "the much published revolution would have started from Kerala".

To one who visits the State, it would be difficult to appreciate that there are large sections of people below the poverty line. That is a peculiarity of Kerala. Everywhere, even in the forestlands, one can see people clad in neat dress, and polyester and terylene are becoming very popular. A friend of this correspondent, who is a top man in the foreign service, commented: "When we were students in the years 1939-43 or even a few years later, we could not afford wrist watches. Even slippers and shoes were considered a luxury, and very few people were found wearing them. There were men moving about without shirts. Now just take a look around in our home state. Transistors, radios, and posh dress found everywhere, even in the so-called slum areas. Do you think there is poverty, atleast to outward appearance?"

Surely there is poverty; but not much of starvation. People have something or other to live on, it appears. It may also be true that all may not be getting nourishing and sustaining food. But people even in the slum areas could be found carrying transistor-radios, and clad in foreign clothes and using foreign umbrellas. Probably they want to put up a show of affluence and fashion, covering up their poverty.

The unemployment situation in Kerala has become explosive. According to a recent survey (1978) of the State Directorate of Economics and Statistics, 11.5 lakh persons are totally unemployed. In 1980, this rose to 12.96 lakhs, approximately. More than half of them are educated.

Employment opportunities are yet to come in a big way. As the employees are found to be militant and organised, employers are cautious to take in more and add to their worries and problems.

In Kerala the educational sector has, from the very early days before Independence, recorded a phenomenal growth. There has been steady growth in the number of schools and colleges. At present there are 1,680 high schools, 2,739 upper primary schools, 6,970 lower primary schools, with a total strength of 55.8 lakh students and 1.76 lakh teachers. Kerala is ahead of other states in educational achievements. About 38 per cent of the State budget is spent on the maintenance and development of education in Kerala while the all-India percentage is only 23. Though the State has marched ahead of other states in the field of literacy and general education, at the school level, the pace of progress in higher education has been comparatively slow. The progress of university education gained momentum only in the recent past. At present there are 133 arts and science colleges in the State, with a total student strength of 1.8 lakhs. There are three universities in the State, namely, Kerala University, Cochin University, and Calicut University, in addition there is an Agricultural University also.

Quantitatively, there is commendable progress in the State, but there has been indiscipline and chaos in the campus since the last few years. After Independence, there has been an increase in the indiscipline in the student community, and to the rulers who are politicians, the student community has become a problem. Mr R. Sanker, the late chief minister, once wondered why the State should waste its funds to mass-produce "poor quality of students" who may not become the desirable type of citizens in the future. Mr M. P. Manmathan, educationist and Sarvodaya leader, feels sorry that the State could not so far give shape to "democratic culture" though its students.

Health services in Kerala are of a high standard in comparison with many other states in India. However, the health care system in the State is still underdeveloped. The classification of medical institutions is neither service-oriented nor based on the concept of integrated medical and health care. The number and distribution of institutions is not need-based, which leads to the concentration of medical institutions in the urban areas resulting in widening regional disparities. There is demand for more institutions, inpatient facilities, and better quality medical personnel. Though crores are spent on the hospitals and medicines, the public is benefited only to a negligible extent because of the poor facilities and services and attention they get in the government hospitals. Corruption is the main stumbling block. Treatment has become costly. Even the Ayurvedic system of medicine which used to be cheaper in the past has now become costlier than allopathy. However, there has been marked advancement in the field of health services since Independence.

The state income for Kerala for 1978-79, according to quick estimates by the State Bureau of Economics and Statistics is Rs 2,618 crores at current prices, recording an increase of 8.9 per cent over the previous year. The per capita state income estimated at Rs 1,056 recorded and increase of 7 per cent over the previous year's estimate of Rs 987 at current prices.

Now, there has been a rise in the income of all sections of employees in the State. Even the unemployed are being given a dole which is mostly used by the beneficiaries for luxuries, with a small share reaching their home. Many families have more than one earning member, and this adds to their prosperity. Compared to the lower categories of employees, like the headload workers, and construction workers, the monthly income of an average middle class family remains fixed and comparatively low. For instance a headload worker gets around Rs 80 per day. The lure for unnecessary expenses increases with the increase in income. A good section of the employees actually carry home only a small portion of their salary or wages, because of this. In general, the lure for luxurious living has become very common, and quite many live beyond their means. The best instance of squandering money is provided by the relatives of persons working in the Gulf countries. To a large extent they have been responsible for the shooting up of prices of land, consumer goods, and cost of services. This has brought considerable hardship to the limited income people at the lower levels.

Amidst the apparent prosperity of the people, there are vast sections of people who still live in want and misery even in the towns and cities. As a political commentator observed: "The standard of living of the people has gone up; but their quality of living is going down".

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MADHYA PRADESH

Deterioration in rural areas

From OUR SPECIAL CORRESPONDENT

BHOPAL

EVEN a cursory glance at the data available on Madhya Pradesh's contribution to the GNP over the years and changes in per capita income levels, shows that thousands of crores of rupees poured in development programmes have achieved precious little towards raising living standards of the people.

Earliest figures with Bureau of Statistics here are of 1961 and latest computed information relates to 1978-79. Statistics on net state domestic product at current prices in crores, per capita income and percentage of increase at constant prices are as follows: For 1970-71: Rs 2,003.2, Rs 488.6, nil and nil. For 1974-75: Rs 3,762.8, Rs 818.9, minus 1 and minus 3.5. For 1978-79: Rs 4,306, Rs 854, minus 5.3, minus 7.3. It is a painful fact that both the domestic product and per capita income in Madhya Pradesh have steadily declined during the last decade

The ratio of major component of domestic product seems to have remained unchanged. The primary sector of agriculture continues to contribute nearly 60 per cent. Actually the decline in this sector (minus 9 per cent of growth over 1970) has mainly contributed towards the decline in national product. The other sectors have achieved only marginal progress during the 70s.

It is easy to surmise that living levels in rural areas have deteriorated over the years. In 1961 the state population was 3.23 crores out of which 2.77 crores lived in the villages. Distribution of population between rural and urban areas remained almost the same in 1981 when the population has grown to 5.21 crores. Any sizable exodus of population to cities is not evident in this state. The plight of the rural poor can, therefore, be easily imagined.

Facilities for education and health care have certainly increased during the last two decades in the State. Literacy has increased from 17.13 per cent in 1961 to 27.82 today. Most of the increase is in the primary stage, which means there are now more literates in rural

Some selected indicators of levels of living: Madhya Pradesh

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	324	521	4,392	6,838
	Rural population					
	(i) Lakhs		277	415	3,603	5,020(a)
	(ii) As per cent of total population		85.7	79.7	82.0	76.3(a)
II.	**Literacy**	Per cent	20.5	27.8	36.2	36.2
	(a) Males	Per cent	32.2	39.4	46.7	46.7
	(b) Females	Per cent	8.1	15.5	24.9	24.9
	Rural literacy	Per cent	..	16.8 (1971)	23.7	23.7 (1971)
	(a) Males	Per cent	..	27.1 (1971)	33.8	33.8 (1971)
	(b) Females	Per cent	..	6.1 (1971)	13.2	13.2 (1971)
	Urban literacy	Per cent	..	49.5 (1971)	52.4	52.4 (1971)
	(a) Males	Per cent	..	60.5 (1971)	61.3	61.3 (1971)
	(b) Females	Per cent	..	37.0 (1971)	42.1	42.1 (1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	153	1,805
	Percentage of working force to total population	1971	Per cent	36.7	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			26.6	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			1.8	2.4
	(iii) Industry			8.0	11.2
	(iv) Others			63.6	60.1
IV.	Population below poverty line	1977-78	Lakhs	287.3	3,046.1
	(a) Rural	1977-78	Lakhs	244.6	2,527.7
	(b) Urban	1977-78	Lakhs	42.7	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	57.7	48.1
	(a) Rural	1977-78	Per cent	59.8	50.8
	(b) Urban	1977-78	Per cent	48.1	18.2
VI.	**Unemployment** (Jop seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	827	16,200
	Educated unemployed	June 30, 1980	'000 number	351.6	7,297.0
VII.	**State/National income** (at current prices)	1979-80	Rs. crores	4,262	90,374
	Per capita State/National income (at current prices)	1979-80	Rs.	828	1,379
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1979-80	Per cent	—0.8	0.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			41.1	33.9
	(ii) Manufacturing			12.1	17.5
	(iii) Public administration and other services			9.2	10.2
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	36.6	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	306	384
	(ii) Pulses	1979-80	Grammes per day	78	30
	(iii) Milk	1977-78	Kg. per year	37	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	10,520	11,311
	(ii) Debts	1971-72	Rs.	967	1,167

Notes: (a) Exclude Assam and Jammu and Kashmir
(...) Not available
Commerce Research Bureau

A year of all Round Development

Facilities to Labourers

The Uttar Pradesh Government has under taken effective measures for the well-being of labourers in oder to seek their maximum co-operation for increasing production and maintain industrial peace.

Some of steps taken by the State Government for the welfare of labourers.

- For the first time protection granted to forest labourers under minimum wages act.
- Enhancement of wages of sugar industry labourers from January, 1981.
- Revision of minimum wages of labourers engaged in agriculture, bidi industry, silk embroidery, woollen blankets manufacturing units, public transport and khandsari units.
- Campaign launched to encourage workers participation in management of government industrial units engaging 200 or more labourers.
- Relief assured to labourers through improvement in industrial peace.
- A thirteen point programme for labourers engaged for sweeping; Wages of labourers of local bodies engaged for sweeping declared first charge.
- The state seeks the co-operation in maintaining industrial harmony.

Issued by Information and Public Relations Department, Uttar Pradesh.

areas. However, because of the slow growth of industries in the State and consequent lack of employment opportunities this growth in literacy has not meant more earning but it certainly has changed the pattern of spending in villages. More money is being spent on fine clothes now than on food. This presents a show of prosperity that is not real.

During the period 1970-71 to 1979-80, the net domestic product (at current prices) of Madhya Pradesh increased from Rs 2,002 crores to Rs 4,262 crores recording a rise of about 112 per cent (or 8.8 per cent per annum). The per capita income (at current prices) of the State also went up during the same period from Rs 488 to Rs 828 recording a much lower increase of about 70 per cent (or about six per cent per annum) than that for the State income.

However, while discussing the standard of living of the people in Madhya Pradesh it would be better to consider the State income and per capita income in real terms or at constant prices. Between 1970-71 and 1979-80, the net domestic product of the State actually declined from Rs 2,002 crores to Rs 1,891 crores or by 5.5 per cent. In the case of real per capita income (*i.e.*, at 1970-71 prices), it also declined from Rs 488 to Rs 367 or as much as by 24.8 per cent. Although the primary sector of agriculture and allied activities continues to be the largest contributor of State income, it is the decline in income from this sector, both in absolute and percentage terms, that has resulted in a decline in the overall State income in real terms. The other sectors have shown marginal increase. The decline in incomes could largely be attributed to the tremendous rise in population of over 25 per cent during the 1971-81 decade (the population went up from 4.2 crores in 1971 to 5.2 crores in 1981).

In 1977-78 more than half the population or 57.73 per cent to be exact was below the poverty line in the State. Those with per capita monthly consumption expenditure of Rs 65 (at 1977-78 prices) corresponding to a minimum daily calorie requirement of 2,400 per person in rural areas and the per capita per month consumption expenditure of Rs 75 corresponding to calorie requirement of 2,100 per person in urban areas are regarded as people below the poverty line. In the villages around 60 per cent lived below the line while of the urban people only 48 per cent were the poor. In Rajasthan, which is as backward as Madhya Pradesh, the grossly poor comprised only 33.76 per cent of the population in 1961 and they are distributed evenly between the towns and villages.

Over the years there has been some improvement in the degree of urbanisation. In 1961 about 2.8 crore people or 85.7 per cent were living in villages and about 40 lakhs or about 14.3 per cent in towns. Although the percentage of urban population has gone up to 20.3 in 1981 and that of rural population has gone down to 79.7, the number of people living in villages has increased to 4.1 crores.

The growing population in villages has to live on almost the same piece of land. There may not be unemployment in the landed class but underemployment grows with the years. Figures for unemployed landless labourers are not readily available. The number of registered unemployed in exchanges were over 4,24,000 in 1979 while those placed into employment were only 33,000 that year. The number of those employed in industries was just over three lakhs.

Over the years there has been very little change in the size of land holdings in Madhya Pradesh. According to the Agricultural Census, in 1970-71 there were in all 53 lakh land holdings of which 25.7 lakh holdings or 48.6 per cent were small (*i.e.*, having area less than two hectares). Out of a total operated area of 211.9 lakh hectares, these small holdings accounted for 20.3 lakh hectares or about ten per cent. On the other hand, large holdings (*i.e.*, ten hectares and above) numbering only 4,917 accounted for as much as 41 per cent of the total operated area. By 1976-77, the total number of holdings increased to 60.6 lakhs and the operated area to 216.9 lakh hectares. The share of small holdings in the number increased to about 51 per cent and in the operated area to 11 per cent. The share of large holdings, in the total operated area, on the other hand, has gone down to 36 per cent. This shows that there has been some impact on the land holdings on account of the distribution of surplus land among the landless.

Under the land ceiling laws 2.4 lakh cases were registered of which only 2.477 cases were pending at the end of October 1980. So far, 1.34 lakh hectares of land has been declared surplus. Out of this, possession has been taken of 82,437 hectares of land of which 46,526 hectares of land has been distributed. Under an ordinance promulgated in June 1980, the State Government conferred ownership rights on landless villagers in respect of homestead land which was expected to benefit about ten lakh poor people.

Facilities for education and health care have certainly increased during the last two decades. Literacy has increased from 17.13 per cent in 1961 to 27.82 per cent in 1981. Most of the increase is in the primary stage which means there are now more literates in rural areas.

However, because of the slow growth of industries in the State and consequent lack of employment opportunities this growth in literacy has not meant more earning but it certainly has changed the pattern of spending in villages. More money is being spent on fine clothes now than on food. This presents a show of prosperity that is not real.

The fact remains that even in 1981, 3.76 crores people continue to be illiterate. The enrolment of students in the age group 6-14 was 60 per cent of the total population in that age group in 1978-79 and 29 per cent in the age group 11-14. The corresponding all-India figures were 85 per cent, 38 per cent respectively.

During the Sixth Five Year Plan (1980-85) it is proposed to achieve 90 per cent student enrolment in 6-11 age group and 45 per cent in 11-14 age group. The main emphasis of the universalisation of elementary education during the Plan would be to cover more girl students as also students from the scheduled castes and scheduled tribes communities. There is a wide gap between the enrolment of boys and girls. During 1979-80, while the enrolment of boys was 82 per cent in age group 6-11 and 45 per cent in age group 11-14, the enrolment for girls was 42 per cent and 15 per cent respectively. Same is true of scheduled castes and scheduled tribes where the respective percentages were : 62 (6-11 age group) and 24 (11-14 age group) and 47 (6-11 age group) and 12 (11-14 age group).

Malnutrition among the people, particularly in tribals, is a serious problem. Scheduled tribes account for about 24 per cent of the States population. The disruption of the ecological balance in tribal areas of Madhya Pradesh has adversely affected their nutritional status. The change in the vegetation of the area, growing pressure of population, new uses of minor forest produce have affected the diet of the tribal people. To combat the problem of malnutrition and under-nourishment the nutrition programme in the State was first launched in 1966 in the tribal dis-

Continued on Page 32

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MAHARASHTRA

Industry, agriculture improve conditions

By A SPECIAL CORRESPONDENT

BOMBAY

MAHARASHTRA has made significant strides on agricultural and industrial fronts and has consequently improved the living conditions of the people as compared to the overall performance at the national level. It is not as if all the areas have shared equally the benefits of development but where industrialisation has not made a good headway cash crops like sugarcane and cotton have contributed their share in improving the standard of living. Yet 47.7 per cent of the population was estimated be living below poverty line.

Per capita income at the current price level stood at Rs 1,903 as against the national figure of Rs 1,379. This growth is largely due to accelerated industrial activity and higher return in agricultural production including cash crops such as cotton, sugarcane etc.

In the industrial field, the annual turnover is about Rs 5,000 crores. The cotton and sugarcane yield about Rs 1,000 crores. Besides, agro-industries fetch another Rs 1,000 crores. All these together have helped the population in the State to better living conditions than in many other states in the country. The industrial prosperity has been achieved mainly because of better infrastructural facilities, productivity of labour and entrepreneurship.

Organised manufacturing activity in Maharashtra plays an important role. Though the population of the State is only nine per cent of the country's population, the State shares about 25 per cent of the income generated in the organised manufacturing activity in the country. However, this activity is largely concentrated in Greater Bombay, Thane and Pune districts which account for 24 per cent of the State's population. According to the latest annual survey of industries, these three districts account for about 83 per cent of Maharashtra's income generated in this sector.

The employment in factories increased at an average annual rate of 2.43 per cent since the formation of the State in 1961 till 1979.

Maharashtra's net domestic production by industrial origin at the current prices was Rs 11,323.6 crores at the end of 1980 as against Rs 1,597.4 crores in 1960-61—a phenomenal increase since the formation of the State.

Some selected indicators of levels of living: Maharashtra

Indicator	Unit	State/Union Territory		All-India	
		1961	1981	1961	1981
I. **Population**	Lakhs	396	627	4,392	6,838
Rural population					
(i) Lakhs		284	407	3,603	5.020(a)
(ii) As per cent of total population		71.8	65.0	82.0	76.3(a)
II. **Literacy**	Per cent	30.4	47.4	28.3	36.2
(a) Males	Per cent	45.1	58.9	40.4	46.7
(b) Females	Per cent	15.9	35.1	15.3	24.9
Rural literacy	Per cent	..	30.6(1971)	..	23.7(1971)
(a) Males	Per cent	..	43.2(1971)	..	33.8(1971)
(b) Females	Per cent	..	17.8(1971)	..	13.2(1971)
Urban literacy	Per cent	..	58.1(1971)	..	52.4(1971)
(a) Males	Per cent	..	66.9(1971)	..	61.3(1971)
(b) Females	Per cent	..	47.3(1971)	..	42.1(1971)

Indicator	Reference year	Unit	State/Union Territory	All-India
III. **Occupational Classification**				
Working population	1971	Lakhs	184	1,805
Percentage of working force to total population	1971	Per cent	36.5	32.9
Percentage to total working force	1971	Per cent		
(i) Agricultural labourers			29.3	26.3
(ii) Livestock, forestry, fishing, plantations etc.			1.6	2.4
(iii) Industry			14.9	11.2
(iv) Others			54.2	60.1
IV. Population below poverty line	1977-78	Lakhs	275.4	3,046.1
(a) Rural	1977-78	Lakhs	214.1	2,527.7
(b) Urban	1977-78	Lakhs	61.3	518.4
V. Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	47.7	48.1
(a) Rural	1977-78	Per cent	55.9	50.8
(b) Urban	1977-78	Per cent	31.6	18.2
VI. **Unemployment**(Job seekers registered with employment exchange)				
Unemployed persons	September 30, 1980	'000 number	1,230	16,200
Educated unemployed	June 30, 1980	000 number	594.2	7,297.0
VII. **State/National income**(at current prices)	1979-80	Rs. crores	11,324	90,374
Per capita State/National income (at current prices)	1979-80	Rs.	1,903	1,379
Rate of growth of per capita State income (at 1970-71 prices)	1970-71 and 1979-80	Per cent	2.6 (At 1960-61 prices)	0.8
Structure of State/National income at current prices				
Share in State/National domestic product (at current prices)	1979-80	Per cent		
(i) Agriculture and animal husbandry			27.8	33.9
(ii) Manufacturing			25.1	17.5
(iii) Public administration and other services			10.7	10.2
VIII. **Health**				
Number of hospital beds per '000 population	December-end 1977	Number	127.1	79.0
IX. **Per capita availability of:**				
(i) Cereals	1979-80	Grammes per day	432	384
(ii) Pulses	1979-80	Grammes per day	48	30
(iii) Milk	1977-78	Kg.per year	25	45
X. **Per capita**				
(i) Assets	1971-72	Rs.	11,682	11,311
(ii) Debts	1971-72	Rs.	1,310	1,167

Notes (a) Exclude Assam and Jammu & Kashmir

(..) Not available

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Of these, primary products such as agriculture, forestry and logging, fishing, mining, quarrying account for Rs 3,383.3 crores as against Rs 668.3 crores in 1960-61. Secondary product (manufacturing, construction, electricity, gas and water supply) Rs 3,721.3 crores in 1980 compared to Rs 422.1 crores in 1960-61; and transport, storage, communication, trade, hotels, restaurants, banking and insurance, real estate and ownership of buildings, business services, public administration and other services accounted for Rs 4,219.0 crores in 1980. The figure in 1961 was Rs 507.0 crores.

Significantly, the contribution of secondary industries such as manufacturing units to the domestic product shot up by six per cent from 26.4 per cent in 1960-61 to 32.9 per cent in 1980, while primary product has gone down from 41.9 per cent in 1960-61 to 29.9 per cent in 1980.

The second economic census of 1980, which covered all non-agricultural enterprises and agricultural enterprises engaged in livestock production, agricultural services, hunting, trapping game propogation, forestry, logging and fishing but not enterprises engaged in crop production and plantation revealed that there were about 18 lakh non-agricultural enterprises in the State engaging 65.36 lakh persons of which 43.28 lakh were hired workers. Nearly 32 per cent (5.74 lakh) non-agricultural enterprises had at least one hired worker on a fairly regular basis. Nearly half of the non-agricultural enterprises and 70 per cent of their employment in the State were in the urban areas.

Maharashtra accounted for about 12 per cent of all-India installed capacity of electricity as on March 31, 1980, and it is nearly 15 per cent and about 16 per cent of all-India output and consumption of electricity in 1979-80. Compared with the installed capacity of 3,858 mw, derated capacity was 3,106 mw as on March 31, 1980.

The number of towns and villages electrified in the State increased to 26,575 by March 31, 1980 from 24,416 in 1979 and further to 27,820 by the end of December 1980. By the end of December 1980, 74.6 per cent of villages and 88.2 per cent of rural population had access to electric supply. The number of agricultural pumps energised up to December 1980 was 48,665 bringing the total to 6.46 lakh pump-sets—an increase of 8.14 per cent during nine months from April 1980 to December 1980.

As for the agricultural sector, cash crops like sugarcane and cotton have been playing a significant role in the prosperity in rural Maharashtra—thanks to the co-operative movement and the State Government's scheme for monopoly purchase of cotton.

The area under sugarcane during 1978-79 was 2.97 lakh hectares. Out of which 2.44 lakh hectares were harvested, giving a total production of 224.82 lakh tonnes of sugarcane with an average yield of 92.10 tonnes/per hectare. During 1980-81, the sugarcane area would have increased to three lakh hectares of which 2.48 lakh hectares would be harvested giving a total production of 235 lakh tonnes of sugarcane.

The State's performance in sugarcane production has naturally a bearing on sugar factories in the co-operative sector. Thirtysix years ago, the late Padmashri Dr Vithalrao Vikhe Patil had launched efforts under the guidance of the late Dr D. R. Gadgil, to set up the first co-operative sugar factory which came into being as the Pravara Co-operative Sugar Factory in Ahmednagar district in 1950. In India, 319 sugar factories were producing sugar last season. Of this, 157 were in the co-operative sector. Maharashtra's share in the co-operative sector was 68 factories producing 40 per cent of the total sugar production in the country.

The increasing tempo in sugar production in the State has helped to a great extent the grower members of these factories. There are four lakh members of co-operative sugar factories. This means this sector alone extends economic benefits to over 20 lakh rural population.

Average area under cotton in Maharashtra is 22.47 lakh hectares and the normal production is 9.5 lakh bales of lint. The State's cotton monopoly procurement scheme, the objective of which is to give guaranteed and remunerative prices to cotton growers by eliminating middlemen has also helped producers to improve their economic conditions.

By the end of January 1981, the total procurement of cotton under the scheme stood at 51.96 lakh quintals of *kapas* valued at Rs 245.47 crores. The average price worked out at Rs 472 per quintal. The procured *kapas* was equivalent to 10.10 lakh bales and 34.81 lakh quintals of cotton seeds.

Maharashtra has launched a unique scheme called the employment guarantee scheme (EGS) for the benefit of the weaker sections in rural areas. Though the scheme was introduced in May 1972, 1974-75 was the first normal year in which efforts for organisation of rural works programmme under the EGS were made. The mandays for which works under the scheme was provided—increased from 4.81 crores in 1974-75 and 10.95 crores in 1975-76, to 20.54 mandays in 1979-80. In 1980-81, the State Government spent Rs 105 crores on the works under the scheme. The average attendance on these works during the year was 5.66 lakhs. By March 1981, 10.874 works under the scheme were in progress involving nearly nine lakh workers.

To help the weaker sections particularly those living below the poverty line, the Chief Minister, Mr A. R. Antulay, has announced a number of schemes. The most radical of these schemes is the horticulture development programme. Under the programme, a horticultural development corporation would be set up to create horticultural estates on the lines of those established by the Maharashtra Industrial Development Corporation.

The radical part of the scheme is that it provides social justice to the weaker sections. Fortynine per cent of the participation in this corporation would be by agricultural landless labour and 51 per cent by the government.

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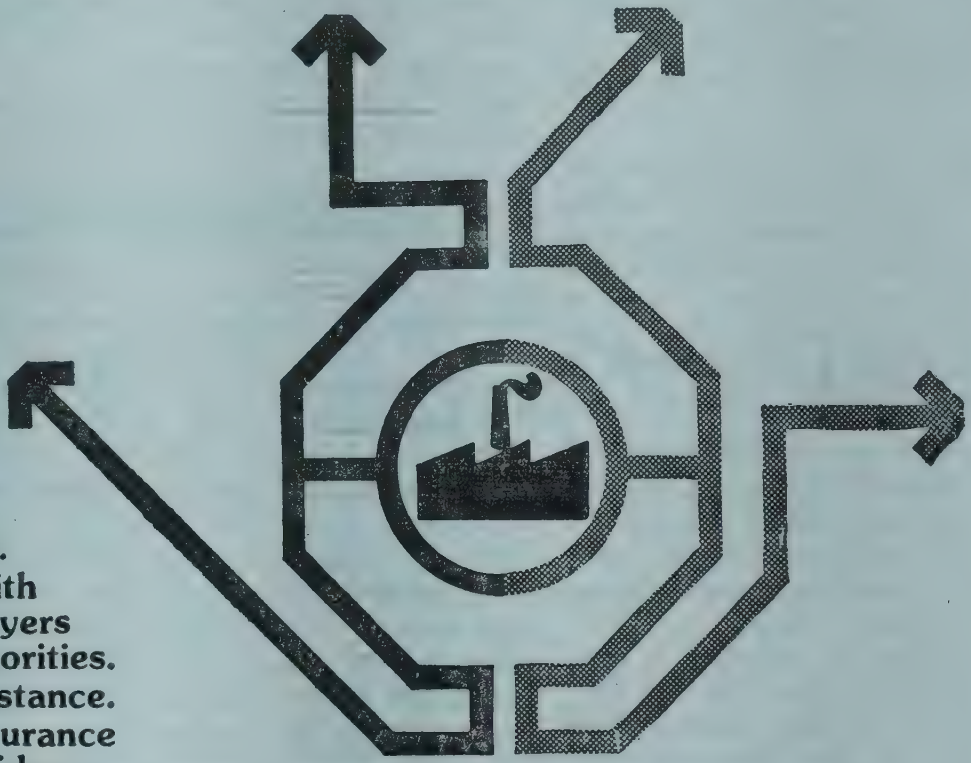

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MANIPUR

No perceptible improvement

From A SPECIAL CORRESPONDENT

Some selected indicators of levels of living : Manipur

	Indicator	Unit	State/Union Territory 1961	State/Union Territory 1981	All-India 1961	All-India 1981
I.	**Population**	Lakhs	8	14	4,392	6,838
	Rural population					
	(i) Lakhs		7	10	3,603	5,020(a)
	(ii) As per cent of total population		91.3	73.6	82.0	76.3(a)
II.	**Literacy**	Per cent	30.4	42.0	28.3	36.2
	(a) Males..	Per cent	45.1	53.0	40.4	46.7
	(b) Females	Per cent	15.9	30.7	15.3	24.3
	Rural literacy	Per cent	28.5	29.8(1971)	..	23.7(1971)
	(a) Males..	Per cent	42.7	43.0(1971)	..	33.8(1971)
	(b) Females	Per cent	14.5	16.4(1971)	..	13.2(1971)
	Urban literacy	Per cent	50.8	53.2(1971)	..	52.4(1971)
	(a) Males..	Per cent	70.4	65.8(1971)	..	61.3(1971)
	(b) Females	Per cent	30.9	40.4(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	4	1,805
	Percentage of working force to total population	1971	Per cent	34.6	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			3.6	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			0.5	2.4
	(iii) Industry			12.3	11.2
	(iv) Others			83.6	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	4.0	3,046.1
	(a) Rural	1977-78	Lakhs	3.4	2,527.7
	(b) Urban	1977-78	Lakhs	0.6	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	29.7	48.1
	(a) Rural	1977-78	Per cent	30.5	50.8
	(b) Urban	1977-78	Per cent	25.5	18.2
VI.	**Unemployment**(Job seekers registered with employment exchange)				
	Unemployed persons	September 30, 1980	'000 number	102	16,200
	Educated unemployed	June 30, 1980	'000 number	48.1	7,297.0
VII.	**State/National income**(at current prices)	1978-79	Rs. crores	108	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	795	1,267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	2.1	1.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			55.7	40.5
	(ii) Manufacturing			4.7	15.2
	(iii) Public administration and other services			17.0	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	96.1	79.0
IX.	**Per capita availability of :**				
	(i) Cereals	1979-80	Grammes per day	466	384
	(ii) Pulses	1979-80	Grammes per day	4	30
	(iii) Milk	1977-78	Kg.per year	58	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	..	11,311
	(ii) Debts	1971-72	Rs.	..	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir
(..) Not available
Commerce Research Bureau

Imphal

DESPITE the government claims to direct the planning efforts at stabilisation of the economy, by and large, the conditions of the general public have not shown much improvement over the years. True there are the nouveaux rich among politicians, contractors, businessmen and bureaucrats due to flow of money, but there is a wide-spread complaint that the plan money is not properly utilised for which it is given. After thirty years of independence the people even in the Imphal city where the population has reached the figure of one lakh in course of years, does not get regular supply of drinking water though it is directly under the Government. A massive public health engineering department has also come up but water is the only thing which does not flow. When water is not available in the state capital, it is better not to think of the rural or interior hill areas. Nagas play a prominent role in the politics of the State but their district headquarters has no water supply system, though both of them now occupy high position and one is the Chief Minister. The Central Government continues to allot big amounts for the development of the State and the people would be happy if it scrutinises how the funds are spent.

Agriculture is the only sector which has made some worthwhile progress in the midst of gloom. The production in agricultural sector is quite good. Double and multi-cropping have been introduced. But again *jhuming* still continues to be the bane of hill economy. Recent survey revealed that in the name of control of *jhuming* huge amount running into several crores was spent. But there was only marginal benefit. Where the money had gone is the question.

The animal husbandry and the veterinary department of the state government is another department which failed to make any significant contribution towards the rural economy. Its 10,000-litre capacity chilling plant practically remains unused. Hardly 200 litres of milk are supplied from the government dairy and most of the time the milk is not treated. Similarly there is nothing to report on other activities of the department.

The acute shortage of power connues to be the major stumbling block for development. No industry can be set up without power. But even domestic consumption of Imphal could not be met. It seems there is no end to the tunnel of the Loktak hydro-electric project and one is not sure when the journey through the tunnel will end to see the light. It started with Rs 11 crores ten years ago; it already reached Rs 80 crores after ten years. Manipur now hardly produces 15 mw of power at the end of thirty years of independence. Progress is slower than that of the snail.

The state industry department provides loan and subsidies for setting up small scale industries. But it is not bothered how the money is being utilised. The result is that money has not been properly utilised and development of small scale industries is not encouraging. In private sector one watch manufacturing unit has come up. But the industries department is not extending any help to it. While the Central Government and the State Bank of India are helping it, the State Government even does not exempt the sales tax for its products. This concern can now produce one hundred watches per month.

The handloom industry of the State is famous. But the State Government is not in a hurry to revitalise it. There is no dyeing house even now. The Handloom and Handicrafts Development Corporation and the Small-scale Industries Corporation have yet to show why they are necessary. In the course of a decade, the industry department could not make the venture of making fibre out of pineapple leaves a commercially successful proposition though the textiles made out of this fibre have wide market. No one in the administration loses his sleep for the sorry state of affairs in the vital department for improving the economy and opening up new avenues of employment. The spinning mills, and khandsari sugar factory are two white elephants of the state government.

There is no progress in setting up forest-based industries to improve the economy of the hill people. Abundance of bamboos remains unexploited. On the contrary, in the hills, forest wealth is being indiscriminately wasted with abandon. Because of politics, the government machinery is helpless.

Pisciculture is an instrument to supprement, the income of the rural people in the fish-eating state of Manipur. The fisheries department has huge funds to distribute favours in the shape of loan and subsidy for fish production. It is quite generous in spending the money. Where the money goes is inexplicable. But the consumers know by sad and real experience that a kilogram of fish is not less than Rs 40 at times and even more. On the other hand, not for good reasons, the fisheries are being converted into paddy fields by the government. The meaning is too obvious to explain in the background of Manipur's environment. Interestingly, even money is doled out as loan or grants for pisciculture in the high hills. While Manipur needs 10,000 tonnes of fish per year, its production is only a little more than 2,000 tonnes.

The public works department has created a rich class of people but it has not shown its anxiety to improve and maintain a state communication system. One comes across reports that in these years money was shown as spent in many cases even without works being done particularly in the hills. In Manipur there is a phrase called "Akas bill" meaning while the things are in the sky, the payment is made *i.e.* payment is made before the supplies are made or **works done.**

As India entered the third decade of independence a section of educated youths in the central valley of Manipur turned insurgents taking arms into their hands to change the existing order and end what they call "exploitation". "The People's Liberation Army" (PLA) formed by a group of Ihasa trained youths under the leadership of N. Bisheswar Singh with Maoist ideology came into being. Bisheswar was captured on July 6 and seven top leaders of his organisation were killed. All of them, it is stated, experienced naked reality of poverty and injustic in the society. As the country's another year of independence begins its march, the Central Government must have a fresh look at the spectre of discountent in this easternmost part of the country, which created an explosive situation. Unemployment is growing by leaps and bounds and infrastructure for economic development is not yet in sight.

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MEGHALAYA

Urban affluence and rural poverty

From S. K. DUTTA

Some selected indicators of levels of living : Meghalaya

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	8	13	4,392	6,838
	Rural population					
	(i) Lakhs		7	11	3,603	5,020(a)
	(ii) As per cent of total population		84.8	82.0	82.0	76.3(a)
II.	**Literacy**	Per cent	29.5(1971)	33.2	28.3	36.2
	(a) Males	Per cent	34.1(1971)	37.0	40.4	46.7
	(b) Females	Per cent	24.6(1971)	29.3	15.3	24.9
	Rural literacy	Per cent	..	23.4(1971)	..	23.7(1971)
	(a) Males	Per cent	..	27.7(1971)	..	33.8(1971)
	(b) Females	Per cent	..	18.9(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	65.2(1971)	..	52.4(1971)
	(a) Males	Per cent	..	69.9(1971)	..	61.3(1971)
	(b) Females	Per cent	..	59.7(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	4	1,805
	Percentage of working force to total population	1971	Per cent	44.2	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			9.8	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.8	2.4
	(iii) Industry			3.5	11.2
	(iv) Others			83.9	60.1
IV.	Population below poverty line	1977-78	Lakhs	5.9	3,046.1
	(a) Rural	1977-78	Lakhs	5.5	2,527.7
	(b) Urban	1977-78	Lakhs	0.4	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	48.0	48.1
	(a) Rural	1977-78	Per cent	53.9	50.8
	(b) Urban	1977-78	Per cent	18.2	18.2
VI.	**Unemployment**(Job seekers registered with employment exchange)				
	Unemployed persons	September 30, 1980	'000 number	10	16,200
	Educated unemployed	June 30, 1980	'000 number	4.3	7,297.0
VII.	**State/National income**(at current prices)	1973-74	Rs. crores	65.4	50,749
	Per capita State/National income (at current prices)	1973-74	Rs.	598	871
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1973-74	Per cent		
	(i) Agriculture and animal husbandry			62.9	49.8
	(ii) Manufacturing			2.6	13.4
	(iii) Public administration and other services			18.7	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	112.5(b)	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	298	384
	(ii) Pulses	1979-80	Grammes per day	4	30
	(iii) Milk	1977-78	Kg.per year	54	45

Notes (a) Excludes Assam and Jammu & Kashmir
(b) Data relates to 1976
(..) Not available

Commerce Research Bureau

SHILLONG

FROM the tremendous increase in the number of automobiles, buildings, brisk trade and commerce in the urban areas of the State, it is possible to get an impression that the State of Meghalaya, which was formed only as late as January 1972, is abounding in affluence. But this would be far from a correct conclusion to draw, though urban areas have been the main beneficiaries of the manifold developmental activities and setting up of various institutions in the State. Meghalaya lives not in urban towns (the urban population was only 2,40,000 out of 13,28,000 or a little more than 18 per cent) and in the rural areas, where 81 per cent of the State population lives, nearly 65 per cent had a per capita expenditure of Rs 55 or less per month in 1973-74. The tribal population alone in Meghalaya constitutes 81 per cent of the total. Even for the urban areas 55 per cent of the population had a consumer expenditure of Rs 75 or less per month and these levels are considered as poverty lines in the State which was somewhat higher than national poverty line because of much higher price levels in the State. In 1978 the number of persons in the State below the poverty line worked out to a figure of 6.66 lakhs in the rural areas and 0.96 lakh in the urban areas. The standard of consumption in the State is poor. In the rural areas the expenditure on food items accounted for as much as 81 per cent of the household expenditure. According to the data thrown up by National Sample Survey (1973-74) non-food items like education, medicines and conveyance accounted for less than five per cent of the expenditure indicating that these are still a luxury in the rural areas.

Later statistics are not available and the estimates of State's income and per capita income of Meghalaya, according to official sources, are yet to be finalised. According to estimates prepared by the State Directorate of Economies and Statistics, which are yet to be vetted by the CSO the value of net domestic product for 1973-74 at current prices was Rs 65.41 crores and the per capita income was Rs 597.20 as against the all-India average of Rs 874.

Meghalaya is a hill state, less than a decade old, having first come in-

15th August—Our Pledge

The 15th of August India's Day of Independence. Haloed with the glory of two hundred years' unceasing struggle of the common people ..... shining with the blood and sacrifice of the countless martyrs.

15th of August is committed to that struggle and sacrifice ..... to establish people's right to shape their own destiny, ... to make possible a social system, free of exploitation, established on the solid foundation of equal rights for all nationalities, tribes, races, communities and classes.

India is a free country now. But that commitment still remains unfulfilled. Millions of toiling people are determined to fulfil their cherished objective—to defeat the conspiracy of the vested interests trying to subvert that sacred commitment to the people. They do not care for the democratic rights of the masses. They want to trample the people's indomitable desire to shape their destiny under the steam-roller of secessionism. They want to shatter the dream of an exploitation-free social system by perpetuating a reign of authoritarianism.

The unrepayable debt of blood and tears to those immortal martyrs and fighters for freedom has never been disowned by the people of the State. They are determined to redeem the pledge of 15th August through glorious and long-lasting struggle against oppression and tyranny on all fronts.

The Left-Front Government is a partner in the people's glorious struggle. It is determined to stand by the commitment of 15th August. Over the last four years this determination is writ large on the expansive grain-fields, is echoed by the resounding roar of the wheels of the industry, and is heard loud and clear in the voices of millions of people.

Today, when the dark conspiracies heighten, when authoritarian and separatist forces are overbusy in subversive activities, let the unity of the indomitable people be unbreakable; let the fond dreams of the freedom-fighters and the immortal martyrs come true-soon.

That's the pledge of 15th August. And may this pledge be proclaimed by the flutter of the Flag of the Independence Day.

Government of West Bengal

to existence as an autonomous state within Assam on April 2, 1970 and then as a full-fledged state on January 21, 1972. It was formed with two hill districts of United Khasi-Jaintia Hills and Garo Hills, carved out of the State of Assam, now converted into five administrative districts—a factor which by itself is a measure of progress made by the tiny, young State. The State covers a land surface of 22,500 square kilometres approximately which is 0.70 per cent of the total area of India. Only four other states of India, namely Sikkim, Tripura, Nagaland and Manipur are smaller than Meghalaya in area. Its population in 1971 was 10,11,699, or 0.18 per cent of India's total of 548 million. Its present population (1981 Census) is 13,27,874 out of which 6,78,883 are males and 6,48,991 are females. Meghalaya thus constitutes 0.19 per cent of the total population of India and ranks 21st in the country.

The decadal rate of growth is 31.25 which is slightly less than the decadal growth rate of 1961-71 which was 31.50. Here it is worth mentioning that after the 1971 Census the capitals of Assam and Arunachal Pradesh were shifted from Shillong, the capital of Meghalaya, and as a result a sizable number of population migrated from Shillong. But for this event, the decadal rate of growth in Meghalaya would have shown an appreciable increase in 1981. Compared to Meghalaya, the all-Inlia decennial growth rate for the decade 1971-81 is 24.79 per cent and thus Meghalaya has a higher percentage of decennial growth rate than the all-India figure. The density of population in Meghalaya per sq km in 1981 is 59 persons while in 1971 it had 45 persons. The East Khasi Hills district which has Shillong as its headquarters has the highest density of population with 98 persons in 1981 and 73 persons in 1971.

The literacy rate in the State is 33.22 per cent—males 37.13 per cent and females 29.28 per cent of the total population which includes even persons falling in the age-group of 0-4. Compared to 1961-71 the decadal increase of literate persons during the decade 1971-81 has been quite appreciable. Out of the total population of 13,27,874 the total literates in 1981 stood at 4,41,077—the decadal increase in absolute terms being 1,42,765 persons. In terms of decadal growth rate it works out to 48 persons. Out of 4,41,007 literates, 2,51,855 are males and 1,90,221 are females. While the total increase from 1961-71 of literates was only 53,234 it has shot up to 1,42,765 during 1971 81. During 1961-71 the male literates increased by 73,284. The corresponding increase for females literates was 26,637 in 1961-71 and 69,481 in 1971-81. Compared to 28.43 per cent of literates in 1971 the literate percentage in 1981 rose to 33 per cent. The male percentage rose from 33 per cent in 1971 to 37 per cent in 1981 and female percentage rose from 24 per cent in 1971 to 29 per cent in 1981. Of the five districts the East Khasi Hills district has the highest percentage with 42.69 per cent. Compared to Meghalaya the literacy percentage of India in 1981 is 34.80 per cent. Compared to the all-India figure (total 34.80 per cent—male 44.95 per cent, female 23.95 per cent), the Meghalaya rate of literacy is less than that of the all-India rate both for total and male persons whereas the female literacy rate of Meghalaya is higher than that of the all-India figure. And Meghalaya is a matriarchal State.

The percentage of literacy for the State was 26.91 in 1961. In 1971 also, Meghalaya's literacy rate was higher than the all-India average of 29.46 per cent. The percentage of literacy is higher in the urban areas than in the rural areas of the State, being 65.22 per cent in urban and 23.40 per cent in rural. The availability of better facilities for education and better facilities for employment in the urban areas account for this high percentage of literacy. The number of literates in Shillong city is at present 1,08,965 out of which 61,872 are males and 47,093 are females. The percentage of literacy is 62 per cent in general and 67 per cent for males and 57 per cent for females.

In 1971 Meghalaya ranked eleventh in the order of literacy among the states of India. Kerala ranked first with 60.42 per cent of literates while Jammu & Kashmir occupied the last place.

Out of the total population of the State, over 45 per cent of the population is found to be economically active. Fiftyfour per cent of the total male population and 34.5 per cent of the total female population are working. If 1,000 persons (1971) of each sex are taken their proportionate distribution amongst different categories is as follows: Cultivators—males 338, females 271; agricultural labourers—males 50, females 37; livestock, forestry, fishing, plantations, etc—males 16, females 7; manufacturing, processing, servicing and repairs-household industry—males 6, females 4; in manufacturing, etc (other than household industry)—males 10, females 1; construction—males 7, females 1; trade and commerce—males 19, females 7; transport, communication, etc—males 10, females 1; other services—males 75, females 17; total workers—males 532, females 346. It will be seen from the above that 338 males and 271 females per thousand population of each sex are cultivators which constitute the largest proportion of workers. Next comes those in other services accounting for 75 males and 17 females per thousand population. The majority of workers in this category are found in the urban areas of the State accounting for 251 males and 76 females per thousand population.

Among the total working population of the State, the female workers account for 612 per 1,000 male workers; the proportion is higher in rural areas being 673 and is lower in urban with 235. The largest proportion of female workers is found among cultivators, accounting for 754 per 1,000 males. The larger proportion is among agricultural labourers, contributing 704 females per 1,000 males. The next group is in the category of trade and commerce, contributing 373 females per 1,000 males. In recent years, however, the females are taking more and more to various categories of jobs in government offices as a result of increasing trend among them for receiving education and acquiring other skills.

Meghalaya's position in respect of per capita gross industrial output in 1978-79 was one-ninth of the all-India average; in per capita value added, it was one-third; in per capita industrial consumption of electricity it was one-fourth; and in per capita bank credit it was one-sixth of the all-India average. Also in relation to all-India average, Meghalaya's net area sown for cultivation as a proportion of total area was one-third; in value of forest produce per hectare, it was one-eighteenth and in fertiliser per hectare of cropped area it was one-half.

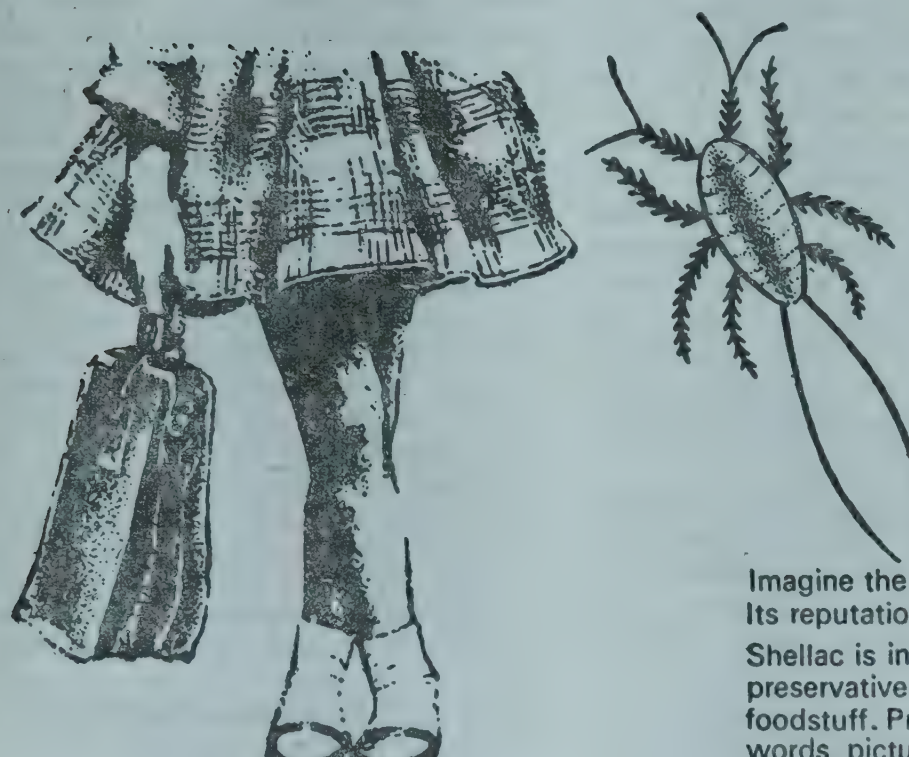
Meghalaya is predominantly rural, more than 81 per cent of the State population living in the rural areas. The tribal population constitutes about 81 per cent of the total.

Meghalaya is fortunate in not having the unemployment problem as acutely felt as elsewhere in the country. No firm estimate has so far been made of the magnitude of unemployment in the State. The results of the state sample of NSS 27th Round show that the person-days of the "wholly unemployed" in the rural area accounted for only 6.62 per cent of the total labour time disposition of the rural labour force. On this basis the number of wholly unemployed in the rural area of the State at the end of 1977-78 is placed roughly at 3,000. According to NSS, the level of unemployment in the urban area can be placed at 5.52 per cent of the urban labour force or roughly 3,200 in terms of wholly unemployed in 1977-78.

Despite various constraints Meghalaya has made tremendous progress in various spheres during less than a decade of its full statehood. The production of foodgrains increased from one lakh tonnes in 1969-70 to 150.18 thousand tonnes at the end of 1978-79. During the same period production of potato and cotton also increased significantly. Consumption of fertilisers also increased fourfold from the level of 1970-71. Under horticultural programmes, new progeny orchards have been established at several centres.

The area under minor irrigation has increased by about 3000 hectares. Production of milk in the State has registered nearly 100 per cent increase from the level of 1968-69. The production of eggs and meat also increased from 17 million and 15,600 tonnes respectively in 1972-73 to 21 million and 18,000 tonnes at present. The number of villages electrified has gone up to 212 in 1978-79 from only 52 in 1968-69.

A major index of economic development is the state of transport and communication facilities. Meghalaya has a hilly terrain and depends solely on road transport. There were only 13 km of road per 100 sq km in 1970. The State has now about 5,000 km of motorable roads and during the current year another 1,000 km are expected to be added. The number of educational institutions in the State increased from 1,914 in 1971 to more than 3,000 in 1979. The enrolment in schools has increased to 2,30,000 in 1979 from 1,68,000 in 1969. The existing number of primary health centres in the State is 23 as against 8 in 1969. The number of beds in government hospitals has increased from 175 in 1969 to 510 in 1979. The number of villages covered under the rural water supply scheme has increased to 243 from 84 in 1969. The Greater Shillong water supply scheme has been taken in hand while the Tura water supply scheme (Phase I), the Umkhen water supply scheme (Phase I) and Crinoline water supply scheme were completed during the Fourth Plan period.



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ORISSA

88 per cent below poverty line

By A SPECIAL CORRESPONDENT

BHUBANESWAR

ORISSA is among the poorest of the states and its per capita income has been the lowest with the exception of Bihar only. However, compared with the national average, the gap has persistently widened. From a difference of only Rs 89.1 in 1961 the gap grew to Rs 145.9 in 1976-77. Over this period Orissa's per capita income increased from Rs 216.5 to Rs 226 at 1970-71 prices, a very poor rate of increase indeed. The national figure had risen from Rs 305.6 to Rs 371 over the decade. Against such a background of low income growth, Orissa has the maximum percentage of population below the poverty line, some 88 per cent according the Sixth Plan document of the State prepared during the Janata regime.

Apparently there was an appreciable increase in the monthly per capita expenditure from Rs 18.76 in 1960-61 to Rs 39.18 in 1973-74 in the rural areas. But adjusted against the increases in the consumer price index there was a decline in rural terms.

There has been a fall in the quantity of consumption, by about 8.2 per cent in rural areas and 17.6 per cent in the urban areas during 1966-74, with 1960-61 as the base.

In urban areas, the monthly per capita expenditure rose from Rs 31.95 in 1960-61 to Rs 59.94 in 1973-74 at current prices. In terms of 1960 61 prices, there was actually a decrease from Rs 31.95 to Rs 26.34. So both in the urban and rural areas, there has actually been a fall in the living standards over the years referred to. The situation is probably worse today, considering the rapid erosion in the value of money and the State's extremely low rate of overall economic growth.

The expenditure on food items as a proportion of the total consumption is among the highest in the country, though not the absolute highest. According to the latest National Sample Survey report on consumer expenditure, Orissa's expenditure on food items was 75.73 per cent in rural areas, and 67.57 per cent in urban areas. These compare with 80.14 per cent and 68.04 per cent in West Bengal, 80.14 per cent and 73.95 per cent in Gujarat, 75.93 per cent and 68.98 per cent in Uttar Pradesh, and the all India average of 74.89 per cent and 67.72 per cent. The reference year is 1973-74, but the pattern is unlikely to have changed much since then.

With the proportion of expenditure on food items mainly cereals, steadily

Some selected indicators of levels of living : Orissa

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	175	263	4,392	6,838
	Rural population					
	(i) Lakhs		164	232	3,603	5,020(a)
	(ii) As per cent of total population		93.7	88.2	82.0	76.3(a)
II.	**Literacy**	Per cent	25.2	34.1	28.3	36.2
	(a) Males	Per cent	40.3	46.9	40.4	46.7
	(b) Females	Per cent	10.1	21.1	15.3	24.9
	Rural literacy	Per cent	..	24.1(1971)	..	23.7(1971)
	(a) Males	Per cent	..	36.1(1971)	..	33.8(1971)
	(b) Females	Per cent	..	12.1(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	49.0(1971)	..	52.4(1971)
	(a) Males	Per cent	..	59.9(1971)	..	61.3(1971)
	(b) Females	Per cent	..	36.1(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	69	1,805
	Percentage of working force to total population	1971	Per cent	31.2	32.9
	Percentage to total working force	1971			
	(i) Agricultural labourers		Per cent	28.3	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.1	2.4
	(iii) Industry			7.3	11.2
	(iv) Others			62.3	60.1
IV.	Population below poverty line	1977-78	Lakhs	169.3	3,046.1
	(a) Rural	1977-78	Lakhs	159.0	2,527.7
	(b) Urban	1977-78	Lakhs	10.3	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	66.4	48.1
	(a) Rural	1978-79	Per cent	69.0	50.8
	(b) Urban	1977-78	Per cent	42.2	18.2
VI.	**Unemployment**(Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	441	16,200
	Educated unemployed	June 30, 1980	'000 number	171.7	7,297.0
VII.	**State/National income**(at current prices)	1978-79	Rs. crores	2,140	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	825	1,267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	0.5	1.8
	Structure of State/National income at current prices				
	Share in State/National deomestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			56.8	40.5
	(ii) Manufacturing			7.8	15.2
	(iii) Public administration and other services			9.8	9.8
VIII.	**Health**				
	Number of hospital beds per 000 population	December-end 1977	Number	47.1	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	342	384
	(ii) Pulses	1979-80	Grammes per day	60	30
	(iii) Milk	1977-78	Kg.per year	9	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	5,879	11,311
	(ii) Debts	1971-72	Rs.	538	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir
(..) Not available
Commerce Research Bureau

rising the average rural or urban consumer has much less to afford on luxuries or even necessities like milk, ghee, egg, fish or meat etc. No per capita consumption figures of these items are available for the simple reason that in a State like Orissa where almost 90 per cent of the people live below the poverty line, such surveys would be hardly worth anybody's trouble. In such a poor society, facilities for health or medical treatment are extremely inadequate. It has a total of 7,127 beds in all the hospitals, public or private, which means roughly one bed for every 4,000 of the population.

Agriculture provides employment to 79 per cent of the working population and accounts for 69 per cent of the State's income. Recurring droughts and irregular monsoon very often affect agriculture in the State. Even so, a growth rate of 4 per cent in agriculture has been recorded over the past 15 years. Industry's contribution in comparison is poor. It is roughly 14 per cent of the total gross product.

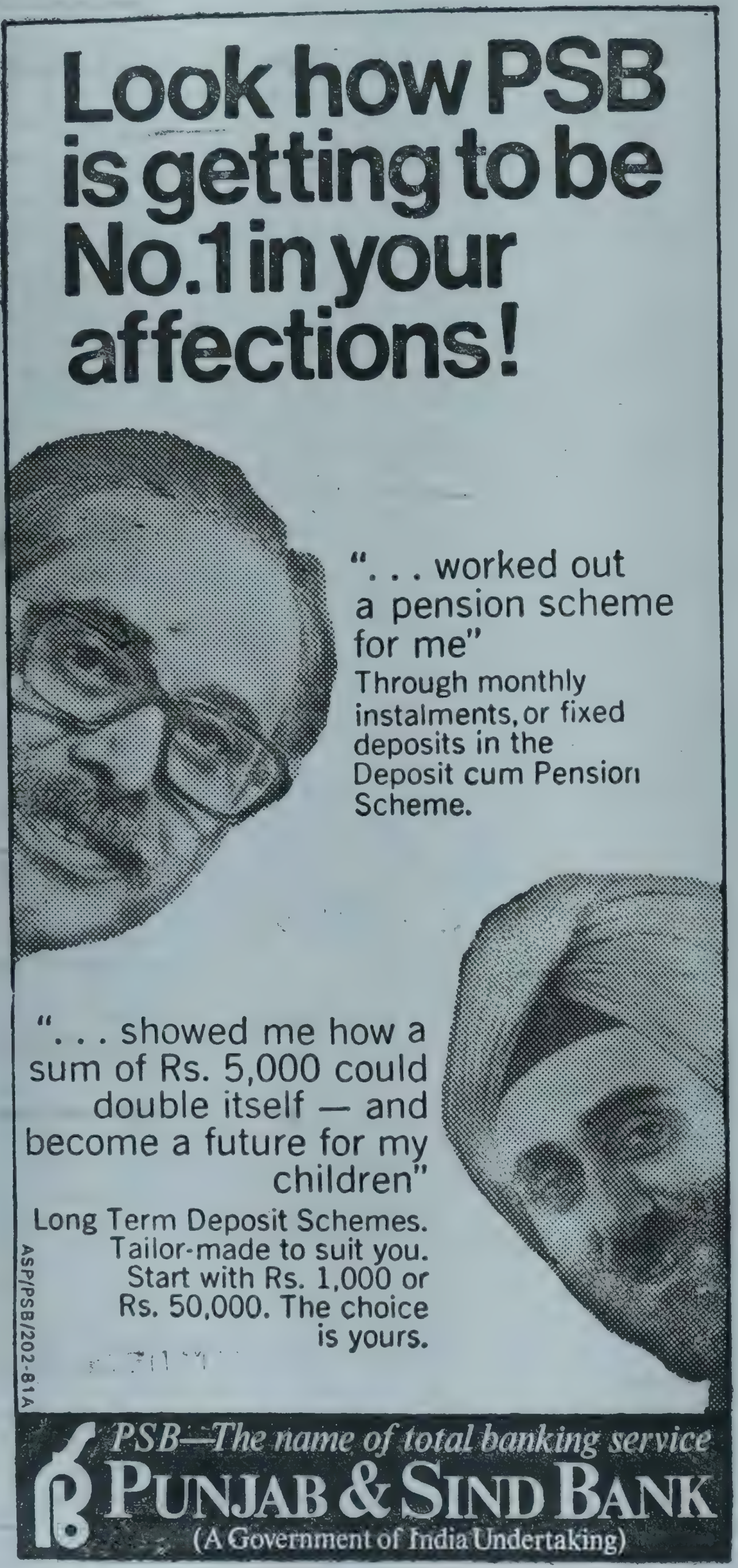
The population of Orissa was 21.945 million in 1971, as against an all India total of 547.95 million. Ten years later, the State's population grew to 27 million, while the national figure rose to 684 million (1981 Census), more or keeping pace with the national average growth rate in population.

Orissa is not among the states where literacy rates among males as well as females are high. It is 38.3 per cent among males, and 13.9 per cent among the females, and together, they average 26.2 per cent.

The occupational classification in Orissa is much on the expected lines. Since 91.6 per cent of a population of 27 million live in rural areas, agriculture and allied occupations provides employment to most able-bodied people. Underemployment is considerable, since there is so far no significant outlet in industry to take the population pressure off the land

On a rough estimate, the percentage of working force to total population would be about 25 per cent in the rural areas, and their dependents would constitute the remaining 75 per cent. In urban areas, the proportion of the workforce to the total population is more or less the same.

The State income at current prices worked out to Rs 1,613.36 crores in 1976-77, and the per capita income to Rs 662. At 1961-66 prices, these worked out to Rs 450 crores and Rs 226, respectively. Over a period of 15 years, the State income increased at an annual rate of 3.8 per cent (compound), and the per capita income at only 1.5 per cent (compound) per year.



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PUNJAB

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From PRAKASH ANAND

CHANDIGARH

PUNJAB is admittedly the country's most prosperous State with the highest per capita income — Rs 2,101 (at current prices), about 60 per cent higher than the all-India figure, Rs 1.249, for the same year (1978-79). In fact, prosperity is writ large over the entire countryside where the vast majority of its people (72.28 per cent) live. Wherever one goes, one finds healthy, robust, well fed and well-dressed people, the exceptions forming a small minority. Perhaps nowhere else in the country does one find such vigorous, hard-working, enterprising and self-reliant people as in Punjab. Had it not been for these distinctive, traits most of them would have been living today as lower middle class people, or even worse. One has only to compare the standard of living of the millions of refugees who crossed the old Bengal border in 1947 with that of the countless people who crossed the old Punjab border when the country was partitioned in tattered clothes and in a pitiable condition. By dint of hard work and the spirit of initiative and enterprise they are now living in comfort after having transformed the land in bifurcated Punjab into a fertile tract.

The *green revolution* has indeed changed the picture radically; it has brought cheer as well as gold in the home of every farmer, changed his outlook on life, made him and members of his family aware of the importance of living well with all the luxuries and comforts he can afford. One sure index of the change that has come in the living style of the people of the State is the number of motor vehicles per lakh of the population. Punjab leads the country with the largest number of motor vehicles (1292) per lakh of the population, the second place being taken by Maharashtra (920 vehicles per lakh of the population). The all-India average is 486. Most of these vehicles are owned by well-to-do farmers and their families. The country side is dotted with good, neatly built, pucca houses in the midst of lush green fields. The number of motor vehicles owned by businessmen, Hindu or Sikh, is small.

Punjab tops in socio-economic growth. The State also leads in per capita food production, 767 kg; next comes Haryana with 562 kg. The consumption of fertiliser is the highest in Punjab (94.8 kg per hectare of cropped area).

The rapid progress made by Punjab during the last two decades in the econo-

Some selected indicators of levels of living: Punjab

	Indicator	Unit	State/Union Terriory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	111	167	4,392	6,838
	Rural population ..					
	(i) Lakhs		86	120	3,603	5,020(a)
	(ii) As per cent of total population		79.4	72.3	82.0	76.3(a)
II.	**Literacy**	Per cent	31.5	40.7	28.3	36.2
	(a) Males..	Per cent	40.7	46.6	40.4	46.7
	(b) Females	Per cent	20.7	34.1	15.3	24.9
	Rural literacy	Per cent	..	27.8(1971)	..	23.7(1971)
	(a) Males..	Per cent	..	34.7(1971)	..	33.8(1971)
	(b) Females	Per cent	..	19.9(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	52.5(1971)	..	52.4(1971)
	(a) Males..	Per cent	..	58.6(1971)	..	61.3(1971)
	(b) Females	Per cent	..	45.4(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	39	1,805
	Percentage of working force to total population	1971	Per cent	28.9	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			20.1	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			0.9	2.4
	(iii) Industry			13.3	11.2
	(iv) Others			65.7	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	23.1	3,046.1
	(a) Rural	1977-78	Lakhs	13.5	2,527.7
	(b) Urban	1977-78	Lakhs	9.6	518.4
V.	Population below the line of poverty as per cent of estimated total po--pulation	1977-78	Per cent	15.1	48.1
	(a) Rural	1977-78	Per cent	11.9	50.8
	(b) Urban	1977-78	Per cent	24.7	18.2
VI.	**Unemployment**(Job seekers registered with employment exchange)				
	Unemployed persons	September 30, 1980	'000 number	453	16,200
	Educated unemployed	June 30, 1980	'000 number	216.1	7,297.0
VII.	**State/National income**(at current prices)	1978-79	Rs. crores	3,295	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	2,101	1,267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	2.9	1.8
	Structure of State/National income at current prices				
	Share in State/National deomestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			57.1	40.5
	(ii) Manufacturing			10.2	15.2
	(iii) Public administration and other services			7.8	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	87.7	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	2,052	384
	(ii) Pulses	1979-80	Grammes per day	36	30
	(iii) Milk	1977-78	Kg.per year	191	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	31,827	11,311
	(ii) Debts	1971-72	Rs.	1,920	1,167

Notes (a) Excludes Assam and Jammu & Kashmir
(..) Not available

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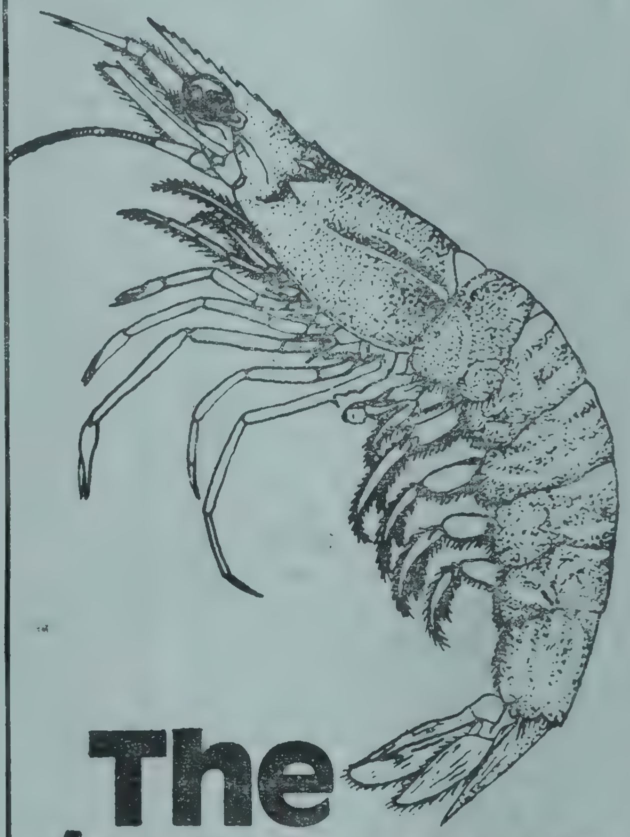

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mic sphere is evident from the per capita income over the years : 1960-61, Rs 366 at current prices; 1965-66, Rs 562; 1970-71, Rs 1,030; 1975-76, Rs 1,597; 1976-77, Rs 1,812; 1977-78, Rs 1,962.

As a result of systematic and sustained efforts to bring about a "white revolution" in the State the per capita availability and consumption per day of milk has gone up to 518 gm which is the highest in the country, the all-India average being only 108 gm. Most families keep milch cattle.

Punjab also leads in the annual per capita consumption of electricity in India — another sign of progress, prosperity and good living. Punjab's figure (1978-79) stands at 25.97 kwh (domestic light and small power), the all-India average being only 11.81. The State's per capita consumption in industrial uses, including electric traction, water works and miscellaneous, is also the highest in the country (159 kwh), the second place being taken by Maharashtra (154.98) and the third by Gujarat (153). Chandigarh's figure is the highest (176.09), but that city is an exceptional case. The percentage of households in Punjab using electricity is 49.62, even though the State is predominantly rural.

The agriculture sector accounts for 52 per cent of the State's domestic product and 63 per cent of the working population registered a growth rate of 7.5 per cent in 1978-79. But there has been a decline since then.

Even the ordinary labourer in this State is much better off than his counterparts elsewhere. The rate of minimum wages, and also the maximum, brings out the difference in income and also in the level of living. For Punjab the minimum wages are Rs 207, the figures for Haryana being Rs 140, Himachal Pradesh 130, UP 110, Rajasthan 130, Delhi 169. The figure for Chandigarh is Rs 225, but this is an exception and does not provide any comparison.

Liquor consumption has already become a regular habit with the majority of Punjabi people, especially the Sikhs. In fact, a family whose adult members (and in numerous cases, even youngsters of school and college going age) do not drink is believed to have a low standard of living. The drink habit is spreading fast, partly because of the fruits of the *green revolution*. Good crops, remunerative prices and all-round success have led most people in the countryside, and also to a large extent in the towns, to drink, both as a relaxation and social prestige.

About 92,000 bottles of country liquor are consumed in the State daily, the estimate of the annual consumption of liquor being Rs 260 to Rs 275 crores. But not all those who drink habitually can afford the luxury; many petty farmers and artisans are in debt and yet they feel they must drink because it has become a part of their living style. The better off land-owners and the middle class people in towns drink whisky; in most social circles those who keep away from alcohol and those who preach prohibition are scoffed at.

Last winter the Punjab Government conducted a large-scale survey to identify the families living below the poverty line and hence unable to maintain even the minimum standard of living expected in Punjab. Thirty-eight per cent of the households in the rural areas and 10.8 per cent of those in urban areas were found to be in the lowest income group. On this basis it has been estimated that the incidence of poverty in the rural areas is three and a half times as much as in the urban areas. The standard of living of the people generally was found to be the highest in Ludhiana district (which is highly industrialised and where almost every member of the family earns by doing part-time jobs for mills and various other enterprises). The people in Gurdaspur district, where 43.8 per cent of the surveyed households have an annual income of up to Rs 3,600, have a subnormal standard of living. These two Punjab districts thus present a contrast in income and living styles. The indebtedness among the petty farmers is substantial, but the desire to live well predominates.

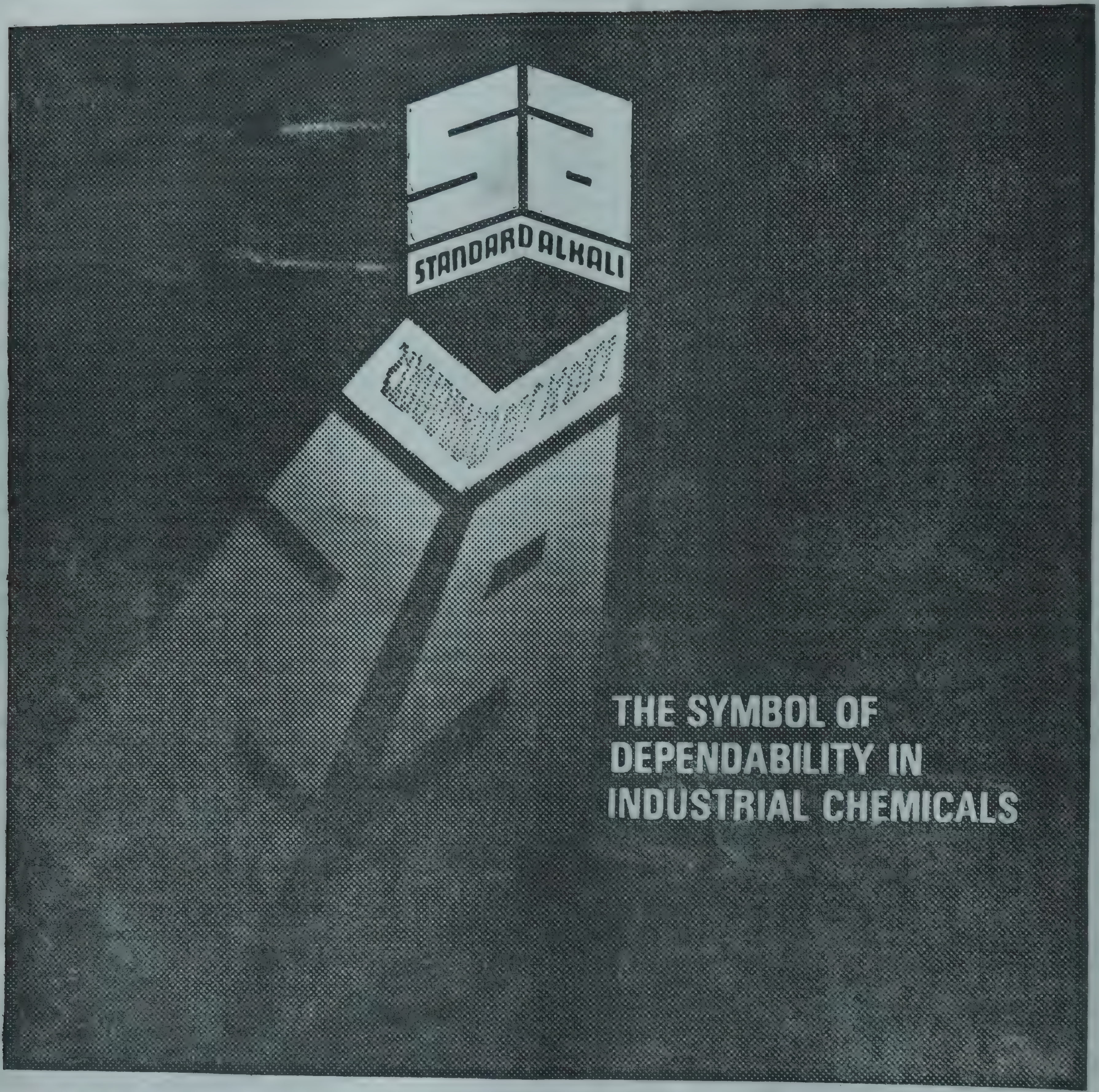
Even a casual visitor to the countryside in Punjab will notice the difference in the living standards now and those 25 years ago. There are radios, TV sets, bicycles, scooters, motor-cycles in most of the villages. The standard of dress is high; khaddar and coarse cloth is worn only by the poorest labourer; others wear terylene or terycot shirts and pants. The old style shoes (jutis) have gone for good and modern shoes are popular despite their high costs. There is crockery and furniture in most farmers' homes. Among the non-Sikhs the traditional "hookah" is out of fashion; the smokers patronise cigarettes.

Notable improvements in the style of living have also been brought about by Punjabis who have gone abroad and who send large sums of money to their families in the countryside. The generous remittances are used to buy land and houses and acquire several amenities. Every second family in central Punjab has a member in West Asia, Canada, the USA or Nigeria.

The fact that there is very little unemployment in Punjab's rural areas is another contributory factor to the relatively high standard of living. According to the State Sample Survey results (1977-78) — the 32nd round of National Sample Survey — the incidence of unemployment in the rural areas is only 2.10 per cent among males and 0.25 per cent among rural females in the 15-59 age group. The problem in the countryside is of underemployment rather than of unemployment, and even the incidence of underemployment is falling because the duration of the slack season in farming is getting shorter owing to intensive farming.

The growing demand for, and provision of, more educational facilities is another index of all-round progress and improvement in the standard of living. Punjab's literacy percentage is now 40.7 (1981 figure); the school facilities (percentage of age group) is 107 for classes I to V, against the all-India average of 80.9; for classes VI to VIII the percentage of age group is 50.9 against 37 (all-India), and for classes IX to XII it is 25.7, against 20.9 (all-India).

The attractions of urban life, with its countless facilities for entertainment and supplementing one's income, have affected Punjabis during the past two decades. This is clear from the shift of the population from villages to towns. According to the "Perspective Plan for Urban Development — 1981-82 to 2000-01", prepared by the National Council of Applied Economic Research, the rate of growth of the urban population in the State is likely to increase from 23.1 per cent in 1961 and 23.7 per cent in 1971 to about 30 per cent in 2001. The 1981 census showed that the urban population percentage was 27.72. It is estimated that unbanisation will increase to the record annual growth rate of 5.3 per cent — twice as fast as now in the next two decades.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RAJASTHAN

Decline in real per capita income

From M. P. JAIN

JAIPUR

EVEN after 30 years of Plan efforts, poverty continues to haunt Rajasthan and more so the rural masses in the State. The poor socio-economic infrastructural base, inadequate durable community assets, unemployment and underemployment are some of the inhibiting factors for the poverty and destitution.

The population of Rajasthan between 1951 and 1981 has more than doubled from 160 lakhs to 341 lakhs. The population growth rates of the State have been higher throughout this period than the growth rates for the country as a whole. Although there has been some improvement in urbanisation from 16.3 per cent in 1961 to 20.9 per cent in 1981, its rural population has gone up from 189 lakhs to 270 lakhs during the same period. Today, as much as 79.1 per cent of its people live in rural areas. According to the 1971 Census there were 80.49 workers which constituted 31.2 per cent of the State's total population. Of the total working force as much as 76.8 per cent were engaged in agriculture and allied occupations. Agricultural labourers accounted for 9.3 per cent of the total work force.

Similar is the case in regard to literacy. The literacy percentage in Rajasthan has improved from 19 in 1971 to 24 in 1981. Yet the number of illiterates has gone up from 209 lakhs to 259 lakhs during the same period.

The proportion of school going children in the 6-11 and 11-14 years age group in Rajasthan increased from 40.9 per cent and 14.4 per cent respectively in 1960-61 to 54.7 per cent and 26.3 per cent respectively in 1977-78. However, this is much below the national average of 82.8 per cent and 37.9 per cent for the above age group. Age-old traditions coupled with hardships suffered in the countryside by the rural families are mainly responsible for the low level of iteracy. There are families even now in the State having no literate person.

In 1977-78 about 105 lakhs people —86 lakhs in rural areas and 19 lakhs n urban areas — were found to be living below the poverty line which formed about 34 per cent of the State's total population. The corresponding percen-age for the country as a whole was 48 per cent. For measuring poverty among the people the Union Government has defined the poverty-line norm as that

Some selected indicators of levels of living: Rajasthan

	Indicator	Unit	State/Union Territory 1961	State/Union Territory 1981	All-India 1961	All-India 1981
I.	**Population**	Lakhs	202	341	4,392	6,838
	Rural population					
	(i) Lakhs					
	(ii) As per cent of total		189	270	3,603	5,020(a)
	population		83.7	79.1	82.0	76.3(a)
II.	**Literacy**	Per cent	18.1	24.1	28.3	36.2
	(a) Males	Per cent	28.1	35.8	40.4	46.7
	(b) Females	Per cent	7.0	11.3	15.3	24.9
	Rural literacy	Per cent	..	3.9(1971)	..	23.7(1971)
	(a) Males	Per cent	..	22.9(1971)	..	33.8(1971)
	(b) Females	Per cent	..	4.0(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	43.5(1971)	..	52.4(1971)
	(a) Males	Per cent	..	55.5(1971)	..	61.3(1971)
	(b) Females	Per cent	..	29.7(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	80	1,805
	Percentage of working force to total population	1971	Per cent	31.2	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			9.3	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.6	2.4
	(iii) Industry			8.3	11.2
	(iv) Others			83.8	60.1
IV.	Population below poverty line	1977-78	Lakhs	104.9	3,046.1
	(a) Rural	1977-78	Lakhs	85.8	2,527.7
	(b) Urban	1977-78	Lakhs	19.1	518.4
V.	Population below the line of poverty as per cent of estimated total po--pulation	1977-78	Per cent	33.8	48.1
	(a) Rural	1977-78	Per cent	33.8	50.8
	(b) Urban	1977-78	Per cent	33.8	18.2
VI.	**Unemployment**(Job seekers registered with employment exchange)				
	Unemployed persons	September 30, 1980	'000 number	362	16,200
	Educated unemployed	June 30, 1980	'000 number	163.0	7,297.0
VII.	**State/National income**(at current prices)	1978-79	Rs. crores	3,199	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	1,025	1 267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	—1.3 (At 1960-61 prices)	1.8
	Structure of State/National income at current prices				
	Share in State/National deomestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			56.1	40.5
	(ii) Manufacturing			9.1	15.2
	(iii) Public administration and other services			9.2	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	63.9	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	375	384
	(ii) Pulses	1979-80	Grammes per day	70	30
	(iii) Milk	1977-78	Kg.per year	97	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	12,573	11,311
	(ii) Debts	1971-72	Rs.	1,592	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir (..) Not available

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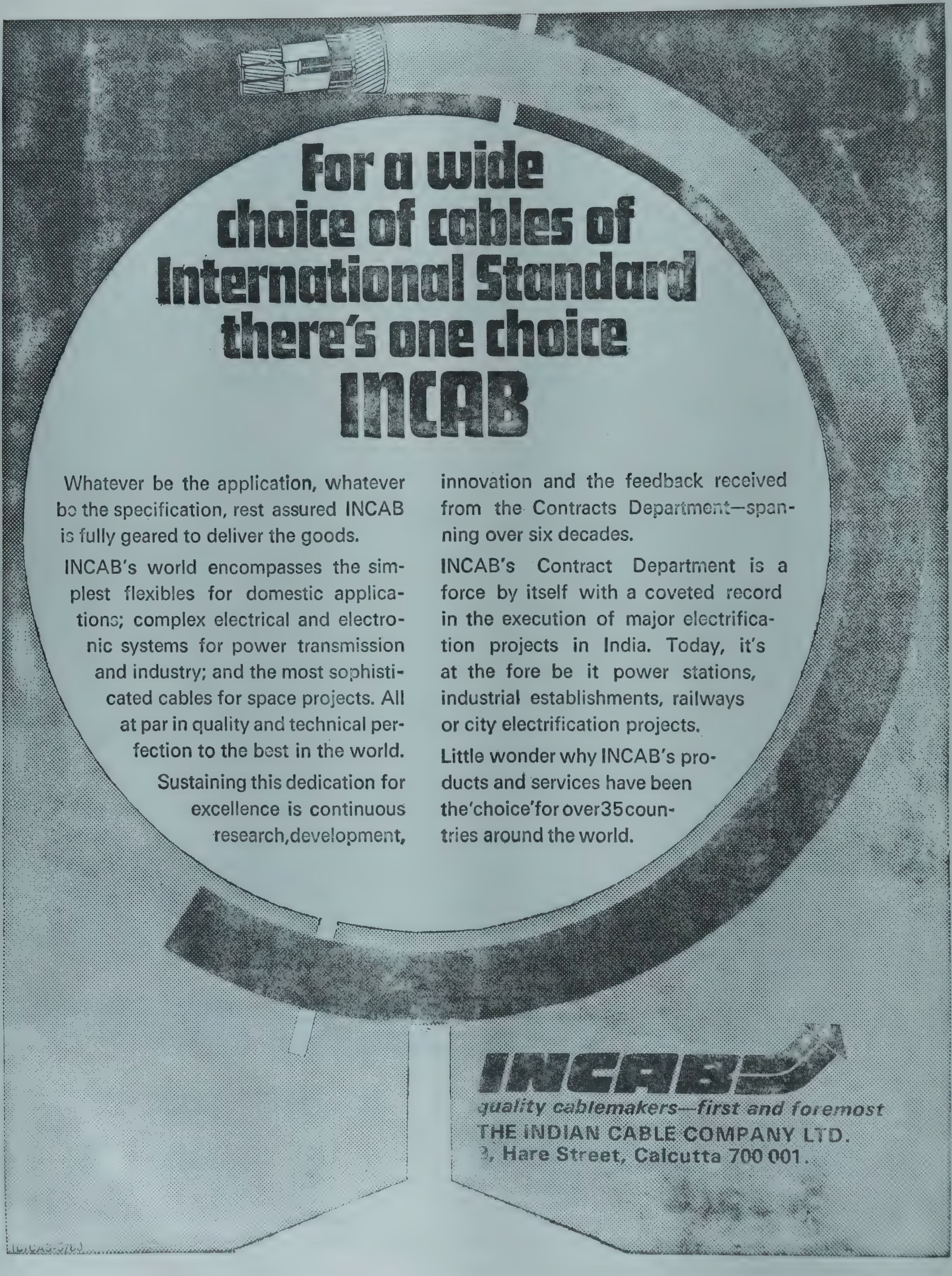

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with per capita monthly consumption expenditure of Rs 65 (at 1977-78 prices) corresponding to a minimum daily calorie requirement of 2,400 per person in rural areas and the per capita per month consumption expenditure of Rs 75 (calorie requirement of 2,100 per day per person) in urban areas.

According to the Agricultural Census, there were 37.27 lakh operational holdings with a total area of 20.34 lakh hectares in Rajasthan in 1970-71. The number of holdings have since gone up to 43.65 lakhs while the operated area declined to 20.30 lakh hectares in 1976-77. Over the years, because of the increase in the number of people depending on land as also the fragmentation of land holdings, the size of land holdings has gone down.

The average size of a landholding declined from 5.46 hectares in 1970-71 to 4.65 hectares in 1976-77. In 1970-71 the marginal and small farmers (*i.e.* having land up to two hectares) constituted as much as 44 per cent of the total number of landholders in Rajasthan while the area operated by them was only seven per cent. In contrast, large farmers (*i.e.* having land above ten hectares) accounted for only 14 per cent of the holdings but 57 per cent of the operated area. Although the shares of these respective categories have undergone some change for the better in 1976-77, the fact remains that a few large farmers continued to corner a large chunk of the area under operation. In 1976-77, the share of small and marginal farmers in the number went up to 49 per cent and in area to 9 per cent. On the other hand, the share of large farmers in holdings as also in area declined to 12 per cent and 52 per cent respectively. This could partly be attributed to the distribution of some surplus land to landless agricultural labourers which became available because of land ceiling laws. However, the progress on this front is rather dismal. In Rajasthan a total of about one lakh hectares of land was declared surplus of which about 89,000 hectares of land had been taken possession so far: Out of the land in possession, about 49,000 hectares or 55 per cent was distributed among 26,000 beneficiaries.

In Rajasthan the level of assets is low and at the same time there is a high degree of indebtedness among the rural households. The percentage of all rural households in the State having assets up to Rs 1,000 was 6.4 per cent while it was 47.2 per cent for agricultural labourers Reserve Bank of India, *All-India Debt and Investment Survey* : 1971-72). The corresponding figures for the country as a whole were 19.7 per cent and 69.1 per cent respectively. As regards indebtedness, the Fourth Rural Labour Enquiry (1974-75) revealed that the average amount of debt per indebted agricultural labour household went up from Rs 585 in 1964-65 to Rs 1,434 in 1974-75, when compared with the all-India figures of Rs 244 and Rs 584 respectively. The indebtedness in Rajasthan was the second highest in the country after Haryana (Rs 1,648).

Provision of safe drinking water is an acute problem. Nearly 72 per cent of the total inhabited villages in Rajasthan numbering 24,037 are categorised as problem villages in this regard. By the end of March 1978 it was possible to provide safe potable water to only 4,005 problem villages. The only consolatio is that all the towns in the State are covered by protected water supply schemes.

As regards medical facilities, there has been some improvement over the past two decades. The number of hospitals and dispensaries has gone up from 491 in 1961 to 3,959 in 1979. Similarly the number of beds in hospitals has increased from 9,459 to 16,979 during the same period. Although the doctor-population ratio has shown some improvement (one registered doctor for about 17,000 population in 1960-61) over the years, yet in 1977-78 it was far from satisfactory at one registered doctor for 10,000 population.

The net domestic product (at current prices) of Rajasthan has risen from Rs 1,593 crores in 1970-71 to Rs 3,199 crores in 1978-79 registering a compound annual rate of growth of 9.2 per cent while the per capita income (at current prices) during the same period has gone up from Rs 625 to Rs 1,025 — recording a lower annual growth rate of 6.4 per cent.

However, in order to assess whether the standard of living of the people in Rajasthan has shown improvement or whether it has deteriorated, it would be more appropriate to compare the State income and per capita income in real terms over a period of time. It would be seen that even in real terms, the net domestic product of Rajasthan (at 1960-61 prices) has shown a rise from Rs 908 crores in 1970-71 to Rs 1,004 crores in 1978-79, achieving a growth rate of only 1.3 per cent per annum. The comparison of per capita income at constant prices (*i.e.* at 1960-61 prices) during this period, on the other hand, bring out an interesting fact. The per capita real income declined from Rs 356 in 1970-71 to Rs 321 in 1978-79, thereby recording a negative growth of 1.3 per cent per annum. This could largely be attributed to the much higher growth rate of population of 2.8 per cent per annum (1971-81 decade) than that for the State income.

The State Government had introduced a number of schemes during the various Five Year Plans which were largely aimed at induction of investment in various sectors of the economy on the assumption that the direct and indirect benefits would ultimately trickle down to the poorest and would assist in raising the standard of living of the people by improving incomes. Although some programmes like SFDA and Special Animal Husbandry Schemes meant for a particular section of the rural poor did aim at the betterment of the individual, they were highly limited in their scope of coverage. Even within this category, the programmes benefited the comparatively better off small farmers than the more deprived lot namely the marginal farmers and the agricultural labourers.

The Rajasthan Government, therefore, launched on October 2, 1977 a new programme called *Antyodaya* meaning the upliftment of the last man. The programme was meant for the poorest amongst the poor in the rural community. The process of coverage of the programme from the poorest man upwards would continue till the man right on the poverty line was reached.

Under this programme it was decided to identify five poorest families from amongst those below the poverty line in each of the 33,000 villages in the State, thereby covering nearly 1.60 lakh identified families. These families would be provided with various economic benefits through self-employment, wage employment and old age pension. For identification of the families the following criteria were prescribed :

1. Families under severe destitution having no economic assets and no member in the age group of 15-59 years.
2. Families having no economic assets but having one or more persons capable of economic activity where annual family earnings did not exceeds Rs 1,200.
3. Families with some assets whose annual income was below Rs 1,800 per annum.
4. Remaining families having some land and assets but were below the poverty line.

The Programme Evaluation Organisation of the Planning Commission had undertaken an evaluation of the working of the *Antyodaya* Programme in 1978. The evaluation revealed that as on January 31, 1979, the target of identifying 1.60 lakh poorest families was achieved and a total of 1,39,815 families were benefited—23,949 families through old age pension, 42,666 families through land allotment, 5,926 families through

Continued on page 65

TAMIL NADU

Over 70 per cent below minimum standards

From OUR SPECIAL CORRESPONDENT

MADRAS

IN Tamil Nadu, thirty years of freedom have thrown up a paradox of the urban elite and middle class enjoying better standards of living while the rural masses continue to wallow in poverty, with no prospects of a better living in sight.

Of the State's population of 48 millions (according to the 1981 census), 34 millions live in rural areas. Fortysix per cent of the rural population and 37.30 per cent of urban population are estimated to live in the poverty sector and could ill-afford a nutritional diet. Taking into consideration other minimum needs such as housing and clothing it has been estimated that over 26 million rural people representing 73.80 per cent of the rural population and 12 million urban people, representing 72.9 per cent of the urban population are below the minimum standard of life. The various developmental schemes should be aimed at these 38 million people who are living below the minimum standard.

The self-sufficiency programme recently launched by the Tamil Nadu Government is a new chapter in rural development which attempts to bring about a fundamental change of approach to rural problems inasmuch as it aims to provide all the basic necessities of life for the rural people within a time frame.

The second notable feature of post-independence Tamil Nadu is that while the agricultural sector has made significant progress in productivity and has accelerated the economic progress of the State, the per capita income in this sector continues to be lower than that in the secondary and tertiary sectors.

It is paradoxical that while food production is increasing, the average intake of calories, protein and other nutrients by different segments of society shows wide disparities. The average calorie intake of children below three years falls short of the recommended level of 1,200 calories per head per day by 500 to 700 calories.

Similarly, the shortage in the case of pregnant and lactating mothers is nearly one-third of the recommended requirement which is 2,500 to 2,900 calories. The average consumption of the general adult population is of the order of 2,200 calories which is again 600 short of the recommendation. Protein consumption by the adult population amounts only to two-thirds of the mini-

Some selected indicators of levels of living : Tamil Nadu

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	337	483	4.392	6.838
	Rural population ..					
	(i) Lakhs		247	323	3.603	5,020(a)
	(ii) As per cent of total population		73.3	67.0	82.0	76.3(a)
II.	**Literacy**	Per cent	36.4	45.8	28.3	36.2
	(a) Males..	Per cent	51.6	57.2	40.4	46.7
	(b) Females	Per cent	21.1	34.1	15.3	24.9
	Rural literacy	Per cent	..	32 1(1971)	..	23.7(1971)
	(a) Males..	Per cent	..	45.1(1971)	..	33.8(1971)
	(b) Females	Per cent	..	19.0(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	56.4(1971)	..	52.4(1971)
	(a) Males..	Per cent	..	66.8(1971)	..	61.3(1971)
	(b) Females	Per cent	..	45.4(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	147	1.805
	Percentage of working force to total population	1971	Per cent	35.8	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			30.5	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.7	2.4
	(iii) Industry			15.2	11.2
	(iv) Others			51.6	60.1
IV.	Population below poverty line ..	1977-78	Lakhs	237.1	3.046.1
	(a) Rural	1977-78	Lakhs	170.5	2.527.7
	(b) Urban	1977-78	Lakhs	66.6	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	52.1	48.1
	(a) Rural	1977-78	Per cent	55.7	50.8
	(b) Urban	1977-78	Per cent	44.8	18.2
VI.	**Unemployment** (Job seekers registered with employment exchange)				
	Unemployed persons	Sept. 30, 1980	'000 number	1,092	16.200
	Educated unemployed	June 30, 1980	'000 number	477.5	7,297.0
VII.	**State/National income**(at current prices)	1979-80	Rs. crores	6,275	90,374
	Per capita State/National income (at current prices)	1979-80	Rs.	1,350	1,379
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1979-80	Per cent	2.2	0.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			33.9	40.5
	(ii) Manufacturing			21.4	15.2
	(iii) Public administration and other services			8.3	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	104.4(b)	79.0
	Number of doctors per '000 population	1977	Number		
IX.	**Per capita of :**				
	(i) Cereals	1979-80	Grammes per day	481	384
	(ii) Pulses	1979-80	Grammes per day	13	30
	(iii) Milk	1977-78	Kg.per year	39	45
	(vii) Cotton cloth	1977–78	Metres per year	13.7	10.2
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	6.827	11.311
	(ii) Debts	1971-72	Rs.	1.422	1.167

Notes : (a) Exclude Assam and Jammu & Kashmir
(b) Data relate to 1976
(..) Not available

Commerce Research Bureau

mum recommended. Judged by the National Sample Survey data for consumption expenditure in Tamil Nadu, nearly 55 per cent of households spend less than a rupee (according to current price level) per day per head on food which can barely provide a per capita 2,200 calories out of the cheapest available food. Morbidity statistics from a children's hospital showed that nearly 20 per cent of incidence of disease among pre-school children can be related to nutritional deficiency. A medical survey of 40,000 school children showed that 36 per cent of them suffer from malnutrition.

The position of medical care which, next to food, is important for healthy living is not quite satisfactory. The 379 primary health centres which serve rural areas afford only the most rudimentary health care. The taluk hospitals are restricted to curative work and the quality of their work suffers from inadequacy of staff and absence of specialities. The lack of adequate medical staff together with absence of transport facilities renders proper servicing of the primary health centres by the hospitals well-nigh impossible. It is needless to mention that the number of beds in hospitals is inadequate and the doctor—population ratio is high. There is also need to develop a coherent working relationship between indigenous and allopathic systems of medicine which today function in separate watertight compartments.

Disease control programmes have also serious constraints, physical and financial. Malaria, which was practically eradicated a decade ago, has staged a comeback with a vengeance, thanks to the growing insanitary conditions in different parts of the State and poor progress of underground drainage schemes. About 15 million people are exposed to the risk of philariasis in the State. As regards smallpox eradication scheme, the staff is found to be inadequate to achieve the targets and the progress in containing cholera is being handicapped by the delay in provision of safe drinking water to the population.

Protected, piped water supply, which is essential to control water-borne diseases, both epidemic and endemic, is available only to 60 per cent of the urban population and that too not adequately. The position is worse in rural areas where more than 130 million people live in scarcity areas. Out of 52,658 villages and hamlets 4,653 do not have any water source, while 3,683 do not have potable water and 14,486 have only inadequate water supply.

While water supply is unsatisfactory, drainage facilities are worse. Only 24 per cent of the urban population is served by underground drainage. The drainage system functions only in the two corporations (Madras and Madurai), five municipalities and four townships, covering in all only four million population. Even in these towns and cities, the system does not cover the entire corporate area.

Traffic and transportation pose a major problem to large agglomerations, especially Madras. The increasing number of motor vehicles coupled with the slow moving traffic and inadequate road width cause serious transportation problems. The majority of commuters depend on bus service in the absence of an integrated transportation system. The fleet strength and frequency of bus service are inadequate to meet public needs. The recent savage hike in bus fare has hit the urban public hard.

The housing situation in major urban centres is causing concern. Lack of adequate housing is the main cause of slums mushrooming near urban agglomerations. The backlog in housing is heavy and a massive effort is yet to be made to wipe out the shortage and the demand of the rapidly growing urban population. There are no detailed statistics available for a correct assessment of future needs. It is, however, estimated that the housing deficit is of the order of 510,000 dwelling units in class I towns and 440,000 in class II and III towns, bringing the total shortage to 950,000 units. The bulk of this shortage is in respect of the economically weaker and low income groups of the population.

The Tamil Nadu Housing Board and the Tamil Nadu Slum Clearance Board are constructing houses and flats for various categories of the population, both in urban and rural areas to the extent possible with available funds from HUDCO and other lending agencies. But the attempts of these bodies have just touched the fringe of the gigantic problem. The Housing Board has planned to step up its rural housing programme by constructing two lakh houses in the next five years. But such a massive plan is yet to be evolved for urban areas.

There has been a phenomenal growth in the number of schools and all villages with a population of 300 have an elementary school within a radius of one mile. There are 4.45 lakhs of boys and 2.28 lakhs of girls in schools. Investment on education is quite high and free education in schools has helped the children from weaker sections to acquire education. Though enrolment was high in elementary schools, the school system had paradoxically contributed to growing illiteracy on account of the heavy drop-out rate of 53 per cent in standards 1 to 4.

While the introduction of the plus two course with its stress on vocational education had improved the quality of school education and employability of the students, college education in the State continues to produce unemployable graduates as the syllabus continues to be outmoded. Restructuring of the syllabus to make it purposeful is the dire need of university education in the State. Exact figures of unemployment in the State are not available. It can however be estimated that 20 lakhs of persons are unemployed in the different sectors. The problem of educated unemployed is becoming more acute year after year.

Many steps have been taken to reduce inequalities between the various sections of society. While legislation was passed to fix a ceiling on land holdings and distribute the surplus lands taken over from big holders to the landless, no attempt to remove glaring inequalities among urban people has been attempted. The problems of poverty and unemployment continue to be grave even after many plans. If economic development should be meaningful, it is necessary to formulate and implement specific measures to relieve the distress of the low income groups and bring down levels of unemployment to tolerable limits.

Rajasthan: Decline in real per capita income

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employment, 60,012 families through credit facilities and 7,262 families through other schemes. Over 17 per cent of the benefited families were sanctioned old age pension. This was purely a welfare gesture and thus had little impact on increasing the earning power of the families concerned.

Although there were encouraging reports from some families that their employment and income had increased after they were brought within the *Antyodaya* Programme, there were also cases reporting the lacuna in that no special arrangements were made for providing technical know-how in management, production and marketing. Thus, the identified families who possibly had low motivation and low assets were left to struggle themselves after land/loan were disbursed. Therefore, the extension agencies as well as the technical personnel, particularly in the field of cottage industries, etc. should assist these families immediately to help achieve the desired objective of building assets and enable the poorest of the poor families to cross the poverty line.

UTTAR PRADESH

Wide disparity in urban & rural consumption

From K. L. MUKERJEE

LUCKNOW

GROWING poverty coupled with unemployment is the biggest drag on the economy of Uttar Pradesh, the most populous State in the country. The impact of relatively higher growth rates achieved during the 70s on reduction of poverty, unemployment and under-employment has not been very encouraging.

In fact, the spiralling prices and the fall in the State per capita income have considerably reduced the purchasing power and the living standards of the people except those of the well-to-do section and the 'neo-rich'. Many studies made in the past have revealed that the fruits of development have fallen rather disproportionately, mostly to the share of the well-to-do. The per capita monthly expenditure in urban areas is as much as 27 times in the rural areas. There is a visible disparity between the consumption of rural and urban areas.

The growth rate of per capita income in different plans ranged from 0.2 per cent to 1.2 per cent per annum. This state of affairs as also the perpetuating maldistribution of assets is responsible for keeping about 47.18 per cent of the population of the State below the poverty line

Poverty encompasses the totality of life and existence of the afflicted population. A committee was formed under the chairmanship of the late Mr Jaiprakash Narayan to suggest ways and means of eradicating poverty of the weaker sections of the population. This report was submitted in 1961. The study ground had classified the village community broadly into 10 different categories.

It has suggested that except the category of families who form the well-to-do sections of the village community and those who have "economic" land holdings, the other nine categories can be treated as weaker section and for the eradication of poverty of them an integrated development programme was needed. This, however, could not be done. Though the State Government took bold steps in introducing some programmes for *antyodaya*, these proved illusory to a great extent.

The SFDA (Small Famers Development Agency) experience has high-

Some selected indicators of levels of living : Uttar Pradesh

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	738	1,109	4,392	6,838
	Rural population					
	(i) Lakhs		643	909	3,603	5,020(a)
	(ii) As per cent of total population		87.1	82.0	82.0	76.3(a)
II.	**Literacy**	Per cent	20.7	27.4	28.3	36.2
	(a) Males	Per cent	31.9	38.9	40.4	46.7
	(b) Females	Per cent	8.3	14.4	15.3	24.9
	Rural literacy	Per cent	..	18.1(1971)	..	23.7(1971)
	(a) Males	Per cent	..	28.0(1971)	..	33.8(1971)
	(b) Females	Per cent	..	7.0(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	43.6(1971)	..	52.4(1971)
	(a) Males	Per cent	..	52.1(1971)	..	61.3(1971)
	(b) Females	Per cent	..	33.3(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	273	1,805
	Percentage of working force to total population	1971	Per cent	30.9	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			20.0	26.3
	(ii) Livestock forestry, fishing, plantations etc.			0.6	2.4
	(iii) Industry			7.9	11.2
	(iv) Others			71.5	60.1
IV.	Population below poverty line	1977-78	Lakhs	502.2	3,046.1
	(a) Rural	1977-78	Lakhs	429.9	2,527.7
	(b) Urban	1977-78	Lakhs	72.3	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	50.1	48.1
	(a) Rural	1977-78	Per cent	50.2	50.8
	(b) Urban	1977-78	Per cent	49.2	18.2
VI.	**Unemployment**(Job seekers registered with employment exchanges)				
	Unemployed persons	September 30, 1980	'000 number	1,358	16,200
	Educated unemployed	June 30, 1980	'000 number	779.7	7,297.0
VII.	**State/National income**(at current prices)	1979-80	Rs. crores	10,114	90,374
	Per capita State/National income (at current prices)	1979-80	Rs.	981	1,379
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	–1.1	0.8
	Structure of State/National income at current prices				
	Share in State/National deomestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			48.9	40.5
	(ii) Manufacturing			11.8	15.2
	(iii) Public administration and other services			9.0	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	51.8	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	390	384
	(ii) Pulses	1979-80	Grammes per day	41	30
	(iii) Milk	1977-78	Kg per year	58	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	13,531	11,311
	(ii) Debts	1971-72	Rs.	929	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir (..) Not available

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lighted several problems and issues. The major limitation has been the extension and coverage of the areas. There is need for extending the geographical and numerical base of the programme to effectively tackle the problems of poverty and unemployment.

Given the structural characteristics of the economy with agriculture and allied sectors contributing about 57.5 per cent of the state domestic product, quantification of unemployment and underemployment problem presents some serious conceptual and statistical problems.

While there has been a significant shift in the pattern of employment during the decade 1961-71 in the unorganised sector (the number of agricultural labourers increased by 67 per cent and the share of agricultural wokers in the total labour force from 11 per cent to 20 per cent), the overall growth rate of employment in different sectors during 1971-79 has been 2.2 per cent per annum. The private sector's contribution has been negligible. That of public and corporate sectors has been 2.3 per cent each.

An analysis of percentage contribution of income from different production sectors indicates that the contribution of primary sector to the total state income decreased from 60.2 per cent in 1971-72 to 51.7 per cent during 1978-79, whereas the corresponding percentage contribution of the secondary and tertiary sectors increased from 11.2 and 28.7 to 16.6 and 31.7 respectively.

The norm of poverty, as laid down in the Draft National Plan (1978-83) is based on minimum nutritional requirement of 2400 calories per day per person in rural areas and 2100 calories per day per person in urban areas. By application of this norm on consumer expenditure collected in the 32nd Round of NSS (1977-78), the cut-off points in respect of per capita monthly expenditure get determined at Rs 63.30 for rural area and Rs 74.76 for urban areas (at 1979-80 prices) in the base year 1979-80. In other words, all ouseholds with per capita monthly ex-enditure in 1979-80 below these limits onstituted the population below the overty line. The per capita monthly xpenditure in urban areas is 1:27 times ore than in the rural areas. There is isible disparity between the consump-ion levels of rural and urban areas.

If one calculated the income need-d to keep a person healthy according o nutrition based norms, it will be ound that the diet of a very large num-er of persons is below the standard. They have incomes that are hardly sufficient to buy nutritionally minimum diet.

Those below the subsistance level are compelled to take up any type of job even if it fetches a nominal return. This pinch has increased further as in UP the earning member has to support a larger family due to high dependency ratio, which works out to 2.23 as against the national average of 2.04.

Live Register figures show that the intensity of unemployment has increased in the 70s. A steady growth from 4.25 lakhs in 1971 to 14.36 lakhs in 1979 is a clear indication of the fact that in the current level of economic activity, demand for labour has fallen short of supply.

Unemployment continues to grow among the educated. During the period 1975-79, the number of persons registered has doubled in all categories of such persons with general education. On June 30, 1979 high school and intermediate pass students together accounted for 76.14 per cent of the total educated registrants, while the proportion of graduates and post-graduates was 20.47 per cent and 3.39 per cent, respectively. Among technical persons except for the category of postgraduates in agriculture and university teachers, all others showed an alarming increasing trend in unemployment.

The strategy designed in the past to restructure the State economy, it seems, has failed to strike the very roots, of institutions and socio-economic and administrative structure. Efforts made, if any, in the past proved ineffective to keep the per capita expenditure of those above poverty line at a resonably constant level. The present trend shows that the spending spree may increase sharply.

In view of the pressing limiting factors, the state planners have proposed to bring up the bottom 20 per cent of the population above the poverty line. Accordingly, the population below the poverty line may be reduced to about 27 per cent and, the disparity in consumption levels of rural and urban areas brought down from 1:27 in 1979-80 to 1:25 in 1984-85.

Unfortunately, in some way or other, various plans and measures till now implemented with a view to better the condition of the poor and the deserving have been constituted and also carried out mostly to benefit those who are economically well off. Our plans are drawn up and implemented by a class of people who hold the power and naturally they want to remain in power. Thus, perhaps, unconsciously, their plans, though aimed in the long run to benefit the common man, who has no say at all in their drawing or their implementation, except as a daily wage labourer, benefit themselves and their kind. And, *Garibi Hatao* remains a far cry.

Gujarat : Better living for more people

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spite of this progress in literacy, the number of illiterates went up from 171 lakhs in 1971 to 191 lakhs in 1981.

The number of educational institutions imparting primary education increased from 18,512 in 1960-61 to 24,000 during 1979-80. The number of pupils enrolled in these schools was around 48.8 lakhs in 1979-80 as against 22.5 lakhs in 1960-61. The number of schools imparting secondary education which was only 1,099 in 1960-61 rose to 3,116 in 1979-80. The percentage of enrolment in class I to V in the age group of 6 to 11 was 96.5 per cent of the total population in the age group in 1978-79 and 45.9 per cent in class VI to VIII in the age group of 11 to 14. There were 370 institutions in the State for higher education at the end of 1979-80 and the students enrolled numbered two lakhs.

The per capita expenditure on education in Gujarat increased from Rs 15 in 1970-71 to Rs 52 in 1980-81 which showed an increase of about 247 per cent.

The reasons why the people of the State are comparatively better off are varied and have a long history behind them. With a long coastline of over 1,000 miles, Gujarat had long maritime traditions. Thousands of Gujaratis sailed to various countries for trade and work in country crafts and brought back home goods and wealth. Even in recent decades, the mass exodus of illiterate and semi-literate rural youth to foreign countries has meant sizable inflow of cash resources, which are net additions to the State's income from production. The farmers in the State are diligent and intelligent. In terms of industrialisation too, Gujarat had a head-start long ago. The fact that Gujarat already ranks third in terms of industrialisation and has recorded substantial increase in production of cash crops, also explains the phenomenon of larger number of people sharing the growing size of the State's income.

WEST BENGAL

No money for milk or meat

From **P. C. MAHANTI**

Calcutta

THOUGH among the highly industrialised states, West Bengal's proportion of rural population to the total is still very high — some 75 per cent — and as many as 70 per cent of them still live below the poverty line. The situation is better in urban areas but these also close to 40 per cent live below the poverty line. In absolute terms, these work out to 26 million in the rural areas, 4.2 million in urban areas. Over the decade the proportion of rural population to the total has not materially changed.

Since 70 per cent of the rural people live below the poverty line and 80 per cent of their monthly expenditure goes towards food purchases, the levels of living must be such where eggs, meat, milk or man-made fibres become luxuries. A per capita consumption figure can still be worked out but no attempt has been made to do that. As for the urban sector there are two sections there too — the affluent section and the urban poor. The levels of living vary from one section to another, but as has already been pointed out even in industrialised West Bengal, the rural population devotes nearly 80 per cent of its income to food purchases, cereal purchases, that is.

In the urban sector where the prices of food and edible oils are rising fast, probably a very large chunk of the income goes towards the purchases of these daily necessities. The left-over for the majority may not be sufficient to purchase such items as ghee, milk or man-made fibres which may be the privilege of people only in high brackets of income. So here also the per capita consumption figure for the people as a whole would be misleading and certainly not meaningful.

In the absence of any survey of rural indebtedness for at least the past decade it is extremely difficult to work out per capita assets or liability figures

West Bengal as per the latest census (1981) has a population of 54.45 million, compared with 44.312 million a decade ago. It gives a growth rate of 2.1 per cent annually, not in the highest bracket among the states, but certainly a high rate considering the truncated State's partition hit land area.

The literacy rate by the national standards is high, some 50.5 per cent among the males and 30.3 per cent among the females. The average for both is 40.9 per cent. The national rate of literacy is

Some selected indicators of levels of living : West Bengal

	Indicator	Unit	State/Union Territory		All-India	
			1961	1981	1961	1981
I.	**Population**	Lakhs	349	545	4,392	6,838
	Rural population					
	(i) Lakhs		264	401	3,603	5,020(a)
	(ii) As per cent of total population		75.5	73.5	82.0	76.3(a)
II.	**Literacy**	Per cent	34.5	40.9	28.3	36.2
	(a) Males	Per cent	46.6	50.5	40.4	46.7
	(b) Females	Per cent	20.3	30.3	15.3	24.9
	Rural literacy	Per cent	..	25.7(1971)	..	23.7(1971)
	(a) Males	Per cent	..	35.8(1971)	..	33.8(1971)
	(b) Females	Per cent	..	15.0(1971)	..	13.2(1971)
	Urban literacy	Per cent	..	55.9(1971)	..	52.4(1971)
	(a) Males	Per cent	..	62.0(1971)	..	61.3(1971)
	(b) Females	Per cent	..	47.8(1971)	..	42.1(1971)

	Indicator	Reference year	Unit	State/Union Territory	All-India
III.	**Occupational Classification**				
	Working population	1971	Lakhs	124	1,805
	Percentage of working force to total population	1971	Per cent	27.9	32.9
	Percentage to total working force	1971	Per cent		
	(i) Agricultural labourers			26.5	26.3
	(ii) Livestock, forestry, fishing, plantations etc.			2.9	2.4
	(iii) Industry			16.0	11.2
	(iv) Other			56.6	61.0
IV.	Population below poverty line	1977-78	Lakhs	275.8	3,046.1
	(a) Rural	1977-78	Lakhs	227.7	2,527.7
	(b) Urban	1977-78	Lakhs	48.1	518.4
V.	Population below the line of poverty as per cent of estimated total population	1977-78	Per cent	52.5	48.1
	(a) Rural	1977-78	Per cent	38.9	50.8
	(b) Urban	1977-78	Per cent	34.7	18.2
VI.	**Unemployment**(Job seekers registered with employment exchange)				
	Unemployed persons	September 30, 1980	'000 number	2,536	16,200
	Educated unemployed	June 30, 1980	'000 number	1,104.8	7,297.0
VII.	**State/National income** (at current prices)	1978-79	Rs. crores	6,657	81,429
	Per capita State/National income (at current prices)	1978-79	Rs.	1,279	1,267
	Rate of growth of per capita State income (at 1970-71 prices)	Between 1970-71 and 1978-79	Per cent	0.5	1.8
	Structure of State/National income at current prices				
	Share in State/National domestic product (at current prices)	1977-78	Per cent		
	(i) Agriculture and animal husbandry			39.1	40.5
	(ii) Manufacturing			17.6	15.2
	(iii) Public administration and other services			8.8	9.8
VIII.	**Health**				
	Number of hospital beds per '000 population	December-end 1977	Number	102.7(b)	79.0
IX.	**Per capita availability of:**				
	(i) Cereals	1979-80	Grammes per day	334	384
	(ii) Pulses	1979-80	Grammes per day	15	30
	(iii) Milk	1977-78	Kg.per year	16	45
X.	**Per capita**				
	(i) Assets	1971-72	Rs.	7,331	11,311
	(ii) Debts	1971-72	Rs.	544	1,167

Notes: (a) Exclude Assam and Jammu & Kashmir
(b) Data relates to 1976
(...) Not available

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36.2 per cent. In the 1971 census, West Bengal's literacy rate was 32.2 per cent for both females and males — as in the national sphere, it shows considerable progress.

The State's net domestic product totalled Rs 6,631.12 crores (1977-78) which comes to Rs 3,912.03 crores at 1970-71 prices. The net per capita income at current prices stood at Rs 1,302.8, while at 1970-71 prices, it came down to Rs 768. Agriculture, forestry and fishery together provided Rs 1,700 crores of a total income of Rs 4,539 crores in 1977-78, which was nearly 40 per cent of the total. Manufacturing, in the registered as well as the unregistered sector, provided over Rs 600 crores or about 16 per cent of the total income, while public administration and other services contributed mostly Rs 340 crores, or just about 6 per cent. The State's economy still depends a good deal on its agriculture for a very large part of its gross product. Consequently, it has around 43 million of the population living in rural areas and over 11 million in urban areas. The proportion of the urban population to the total is around 25, so the rural population is 75 per cent of the total.

West Bengal's working population as per the 1971 census is calculated at 12.37 million. The breakdown is given in the table below :

Distribution of workers by broad categories in West Bengal (1971 Census)]

Category of workers	No. in million	Percentage to total workforce
Cultivators	3.96	32
Agricultural labourers ..	3.27	26.4
Livestock forestry fishing etc. .	0.36	2.9
Total Agricultural and allied workers	7.59	61.3
Mining, quarrying	0.12	0.9
Manufacturing	1.74	14.1
Construction	0.12	1.0
Trade and Commerce ..	0.98	8.0
Transport storage and communication	0.52	4.2
Other services	1.30	10.5
Total nonagricultural workers	4.78	38.7
Grand Total	12.37	100.0

With the population in the 1971 census reckoned at 44.3 million, the proportion of the working force to the total works out roughly to 27 per cent. The pattern is likely to be the same in the 1981 census, although the details for the above calculation are not yet available.

To find out the correct levels of living in the State one has to tackle the urban and rural sector separately. It is the same about public health as well. West Bengal has a total 2,400 medical institutions including 342 hospitals, 625 clinics, 980 health centres and 405 dispensaries, and together they have 53,465 beds which gives a bed per every 500 of the population, but the average is misleading for a majority of these institutions happen to exist in urban centres.

The unemployment problem is serious in the State; that of educated unemployed particularly acute. A year ago, nearly one million educated were registered with employment exchanges as job seekers. The majority were men. Among them, some 3,000 were engineering graduates and some 150 were medical doctors. A total of 2.5 million are employed in the public and private sectors. Interestingly, the public sector is a greater source of employment in the State than the private sector, accounting for some 1.4 million out of a total of 2.5 million. Of rural unemployment, which is really underemployment no real estimate is available yet, but it is widely known that the problem of underemployment or disguised unemployment is quite serious in West Bengal.

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Levels of living: A statistical profile

By COMMERCE RESEARCH BUREAU

Per capita income in India: 1970-71 to 1979-80

Year	Per capita income (Rs) At current prices	Per capita income (Rs) At constant prices (1970-71 prices)
1970-71	632.8	632.8
1971-72	660.2	626.6
1972-73	711.5	604.1
1973-74	870.9	621.2
1974-75	999.7	616.2
1975-76	1,020.6	662.4
1976-77	1,085.8	658.0
1977-78	1,210.0	701.0
1978.79	1,267.2	727.6
1979-80	1,378.8	677.8

SOURCES: 1. Government of India, Ministry of Planning Central Statistical Organisation, **National Accounts Statistics, 1970-71 1977-78,** New Delhi 1980.
2. Commerce Research Bureau's Data system.

Statewise employment generated under Food-for-Work Programme during 1977-78 and 1978-79

(Lakh mandays)

State/Union Territory	Employment generated 1977-78	Employment generated 1978-79
States		
Andhra Pradesh ..	—	186.79
Assam	...	175.64
Bihar	14.76	641.42(a)
Gujarat	—	301.00
Haryana	—	30 03
Himachal Pradesh ..	0.70	2.72
Jammu & Kashmir ..	—	10.99
Karnataka	5.02	44.71
Kerala	21 43	40.69
Madhya Pradesh ..	44.00	450.00
Maharashtra	...	143.09
Orissa	68.69	362 39
Punjab	0.14	49.93
Rajasthan	6.87	500.74
Tripura	...	29.65
Uttar Pradesh	58.19	223.44
West Bengal	218.43	533.44
Union Territory		
Mizoram	—	2.00
Total	438.23	3,728.55

Notes: (a) Data relate to April-September 1978
(—) = Nil (...) = Not available

SOURCE: Government of India, Ministry of Rural Reconstruction, **Annual Report 1979 80, 1980**

Statewise average amount of debt per indebted agricultural labour household

Zone/State	1964-65	1974-75 With land	1974-75 Without land	1974-75 All
Central Zone	265	675	641	661
Uttar Pradesh	280	698	698	698
Madhya Pradesh	238	624	541	588
Eastern Zone	174	426	256	355
Bihar	212	467	320	406
Orissa	155	497	246	422
West Bengal	99	266	151	206
Assam	119	256	185	230
Manipur	—	367	336	353
Tripura	119	211	184	204
Meghalaya	...	89	87	89
Southern Zone	239	778	471	620
Andhra Pradesh	270	938	448	658
Tamil Nadu	249	935	516	682
Kerala	127	393	217	372
Pondicherry	...	733	426	512
Western Zone	241	308	501	655
Gujarat	294	1,099	640	799
Maharashtra	167	638	353	514
Karnataka	312	933	563	750
Goa, Daman & Diu	...	386	400	391
Northern Zone	612	1,522	1,278	1,330
Rajasthan	585	1,549	1,326	1,434
Punjab	...	1,519	1,172	1,201
Haryana	629	1,966	1,583	1,648
Jammu & Kashmir	224	494	507	498
Himachal Pradesh	—	753	2,389	992
Delhi	1,060	—	...	—
All-India	244	660	498	584

Notes: Zones relate to the regions in the country in which the different States were grouped by the National Sample Survey Organisation which conducted the enquiry for the Labour Bureau.
(—) = Nil or negligible
(...) = Not available

SOURCE: Labour Bureau, Ministry of Labour, **Final Report on Indebtedness among Rural Labour Households, Rural Labour Enquiry, 1974-75.**

Private consumption by people below and above the poverty line in rural areas: 1977-78

(Act 1976-77 prices) (Rs million)

Commodity group	Below to poverty line	Above to poverty line	Total
Cereals and cereal substitutes	50,757.66	6,9271.17	1,20,028 86
Pulses	3,333.41	6,154.25	9,487.67
Milk and milk products	6,365.87	30,095.41	36,461 29
Edible oils	4,635.79	9,304.70	13,940.49
Meat, fish and eggs	5,110.76	12,285.14	17,395.91
Other food products	20,167.29	40,627.33	60,794.63
Sugar and gur	4,484.59	14,578.05	19,062.65
Pan, tobacco and intoxicants	5,151.04	10,988.25	16,139.30
Fuel and light	3,113.47	5,283.81	8,397.29
Clothing	5,478.67	34,371.49	39,850.18
Miscellaneous	9,401.17	54,777.52	64,176.71
Rent and taxes	483.81	3.711.19	4,195.01
Durable goods	1,821.45	24.797.56	26.619.02
Total	1.20,305.03	3.16.245.98	4.36.551.01

SOURCE: Government of India, Planning Commission, Perspective Planning Division. **Report of the Task Force on Projections of minimum Needs and Effective Consumption Demand,** New Delhi 1979

(Rs)

State/Union Territory	At Current Prices										At 1970-71 Prices									
	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
States																				
Andhra Pradesh..	586	628	659	863	1,020	895	895	1,018	1,083	1,176	586	592	536	628	634	633	568	629	678	648
Assam	538	549	572	644	818	776	851	932	960	...	538	542	546	541	528	564	553	582	572	...
Bihar	402	415	480	575	687	661	700	735	...	...	402	406	397	382	394	413	422	430	...	..
Gujarat	829	830	762	1,121	1,038	1,215	1,340	1,452	...	...	829	837	651	782	650	802	817	840	877	...
Haryana(a) ..	845	928	989	1,174	1,217	1,274	1,466	1,600	...	...	441	441	426	425	421	462	486	498	537	...
Himachal Pradesh	678	716	769	936	1,048	1,078	1,029	1,178	1,295	1,317	678	680	669	693	678	738	686	729	742	688
Jammu and Kashmir (a) ..	524	572	601	721	835	883	897	986	1,145	...	292	296	300	318	325	329	345	355	386	...
Karnataka ..	685	698	712	973	1,077	1,005	999	1,129	1,136	1,267	685	683	629	719	696	702	631	723	723	722
Kerala	564	563	636	777	883	907	948	987	...	...	564	579	79	569	569	564	542	557	...	...
Madhya Pradesh ..	489	534	573	726	819	769	759	905	854	828	489	507	473	474	457	467	436	494	458	367
Maharashtra(a) ..	809	850	881	1,125	1,380	1,393	1,505	1,637	1,694	1 903	430	434	410	451	471	488	508	527	536	542
Manipur	396	468	572	691	789	789	770	802	795	...	396	410	396	464	497	492	482	510	467	...
Orissa	482	480	576	697	701	715	659	799	825	...	482	434	457	481	427	490	421	488	501	...
Punjab	1,030	1,080	1,172	1,438	1,525	1,597	1,812	1,962	2,101	...	1,030	1,046	1,057	1,079	1,083	1,133	1,166	1,231	1,298	..
Rajasthan(a) ..	625	567	597	826	843	850	907	964	1,025	...	356	304	277	307	276	305	316	311	321	...
Tamil Nadu ..	583	651	675	808	841	860	972	1,051	1,116	1,350	583	602	595	614	524	613	611	661	682	711
Tripura	502	563	534	649	789	813	831	862	861	...	502	540	461	553	512	518	567	558	558	...
Uttar Pradesh ..	486	497	605	673	760	730	834	949	965	981	486	451	469	439	450	481	487	511	524	441
West Bengal ..	735	789	790	946	1,090	1,116	1,202	1,268	1,279	...	735	744	707	715	733	761	750	784	763	...
Union Territories																				
Delhi	1.186	1,290	1,371	1,525	1,846	2,015	2,180	2,310	2,445	...	1,186	1,226	1,205	1,196	1,196	1,259	1,307	1,342	1,340	...
Goa, Daman & Diu	916	993	1,048	1,284	1,506	1,615	1,791	2,000	...	...	916	1,006	992	1,016	1,148	1,224	1238	1,293	...	...
Pondicherry ..	844	978	1,053	1,372	1,497	1,593	1,718	2,021	...	...	...	...	...	...	...	...	...	...	...	...
All-India	633	660	712	871	998	1,021	1,086	1,210	1,267	1,379	633	627	604	621	616	662	658	701	728	678

Notes: (a) Data on constant prices relate to 1960-61 prices.
(...) = Not available
Data for the States of Meghalaya, Nagaland and Sikkim and the Union Territories of Andaman and Nicobar, Arunachal Pradesh, Chandigarh, Dadra and Nagar Haveli, Lakshadweep and Mizoram are not available.

SOURCE: **Communication** from Government of India, Ministry of planning, Central Statistical Organisation, New Delhi.

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Private consumption by people Below and Above the poverty line in urban areas: 1977-78

(At 1976-77 prices)

(Rs million)

Commodity group	Below poverty line	Above poverty line	Total
Cereals and ceral substitutes	7,719.59	11,696.91	19,416.51
Pulses	685.86	1,433.79	2,119.66
Milk and milk products	2,199.37	9.889.44	12.088.82
Edible oils	1,377 06	3,638.61	5,015.68
Meat, fish and eggs	1,482.19	5,135.37	6,617.57
Other food products	6,751.22	27,974.76	34,725.99
Sugar and gur	1,300.63	3,521.38	4,822.02
Pan, tobacco and intoxicants	1,063.78	3,405.26	4,469.05
Fuel and light	685.95	1,778.99	2,464.95
Clothing	952.14	7,210.72	8,162.87
Miscellaneous	4,447.20	25,667.39	30.114.60
Rent and taxes	2,779.94	16,614.19	19,394.14
Durable goods	329.40	4,777.68	5,107.09
Total	31,774.37	1,22,744.58	1,54,518.99

SOURCE: Government of India, Planning Commission, Perspective Planning Division, **Report of the Task Force on Projections of Minimum Needs and Effective Consumption Demand** New Delhi, 1979.

Statewise monthly per capita expenditure: 1968-69

State/Union Territory	Rural			Urban		
	Total expenditure (Rs)	Expenditure on food		Total expenditure (Rs)	Expenditure on food	
		Actual (Rs)	Percentage to total		Actual (Rs)	Percentage to total
States						
Andhra Pradesh	31.47	23.12	73.47	44.44	29.13	65.55
Assam	37.57	29.00	77.19	55.39	37.39	67.50
Bihar	29.78	23.00	77.23	44.14	30.47	69.03
Gujarat	34.53	27.66	80.10	40.21	29.70	73.86
Haryana	47.02	36.38	77.37	54.88	36.63	66.75
Himachal Pradesh	36 50	30.46	83.45	63.52	42.45	66.83
Jammu & Kashmir	38.12	27.43	71.97	38.78	25 93	66.94
Karnataka	31.21	23.51	75.33	42.90	29.29	68.27
Kerala	36.18	23.10	63.85	38.39	26.06	67.88
Madhya Pradesh	31.13	23.60	75.81	44.35	29.42	66.34
Maharashtra	38 84	23.12	72.10	34.06	33.05	63.46
Manipur	34.15	27.60	80.82	43.34	31.72	73.19
Nagaland	..	..	..	61.71	43 05	69.76
Orissa	28.24	22.50	79.67	48.26	33.97	70.39
Punjab	56.56	38.46	68.00	49.74	33.41	67.17
Rajasthan	41.06	28.17	68.54	46.49	31.11	66.92
Tamil Nadu	30.02	22.56	75.15	40.68	26.74	65.73
Tripura	41.21	31.83	77.24	54.65	38.38	70.23
Uttar Pradesh	33.02	23.04	72.04	41.08	27.38	66.65
West Bengal	29.85	23.93	80.17	53.52	35.01	65.42
Union Territories						
Delhi and Chandigarh ..	53.11	35.33	66.52	68.60	41 75	60.86
Goa, Daman & Diu	41.95	29.29	69.82	61.17	38 94	63.65
Pondicherry	30.76	23.01	74.81	52.76	32.79	62.15
Other Union Territories ..	38.21	30.02	78.57	66.40	41.00	61.75
All-India	33.28	24.70	74.20	46.04	30.58	66.42

SOURCE: Government of India, Ministry of Planning, National Sample Survey Organisation, Department of statistics, **The National Sample Survey Twentythird Round: July 1968 Jun** 1969

DOCUMENT

Uncertain '80s for developing world

THE external pressures on developing countries have shown little sign of easing over the past 12 months. The combined current account deficit of the oil-importing countries rose from $ 26 billion in 1978 to $ 70 billion in 1980 and may rise even higher this year. Slow growth in the industrial countries is curbing demand for developing countries' exports while the price of petroleum (a product that now constitutes some 25 per cent of developing countries' import bills) increased over 80 per cent in real terms between 1978 and 1980.

While many of the better-off developing countries have been able to expand exports and borrow extensively in commercial markets, for most of the poorer countries these new pressures come at the end of a decade in which they have made little or no progress. Some countries in South Asia have weathered the 1970s reasonably well. But the majority of the poor countries of Asia and Africa suffered reduced growth in the 1970s, participated negligibly in the expansion of world trade and benefited from aid increases only for a short period after the first oil-price rise.

Now they face the 1980s, which have started badly for them, with no sign of change in either their trade or their aid prospects. There is much to be improved in their domestic performance. But without more support from the international environment, their maximum efforts can at best yield only slow progress. The world will divide even more sharply between the haves and the have nots. These countries, even excluding China, have a population of well over 1 billion people. The 1980s therefore pose the question of how developing countries in general can maintain or accelerate their growth; and how the poor countries in particular can find ways out of an increasingly desperate predicament.

Ten-year perspective

The 1980s have begun on a sluggish note. Growth in the industrial market economies as a group slowed down sharply in 1980 and will remain slow in 1981 as well. These countries show few signs of overcoming the inflationary legacy of the 1970s — just one of several similarities between the two decades. Others include rising real oil prices; continuing large trade deficits and, consequently, heavy borrowing from abroad by the developing countries; and the prospect of much slower growth in low-income countries than in middle-income countries.

Growth in the 1970s

The *industrial countries* grew at just over 5 per cent a year in the 1960s and, until the last years of the decade, experienced relatively little inflation or unemployment. Their erratic growth in the 1970s averaged only 3.3 per cent a year. Aggregate output fell in 1974-75; although it then recovered, the steady growth of the 1960s has not been resumed. Of all the different country groups, the industrial countries have fallen farthest below their earlier trend.

The progress of *developing countries* has been influenced both by the external environment and by their domestic policies. For the oil exporters, where one-fifth of the population of developing countries lives, the 1970s were a period of rapid growth. Some developing countries also obtained indirect benefits from higher oil prices — by increasing their exports to the oil producers or from remittances of migrant workers or from aid from the oil producers.

As a group, oil importers were affected in two main ways by the events of the 1970s.

Their current account deficit widened, from $ 7 billion in 1973 to $ 33 billion in 1974 and $ 39 billion in 1975 (5.2 per cent of GNP). It then fell to $ 26 billion by 1978 as the industrial countries recovered and the developing countries expanded their exports. But the 1979-80 oil-price increase and slower growth in the industrial economies boosted the developing countries' current account deficit to $ 44 billion in 1979 and $ 70 billion in 1980 (4.5 per cent of GNP). Preliminary estimates indicate that it may remain at about this level in 1981.

Projected growth, developing countries : The overall effect of all these different influences suggests that developing countries could improve on their record of the 1970s, when they grew at 5.1 per cent a year. In the 1980s the High case projects about 5.7 per cent a year, the Low case about 4.5 per cent. While countries adjust, growth is constrained. In the High case, it regains its pace of the 1960s and early 1970s. In the Low case, growth remains below historical averages throughout the decade.

Interdependence

Despite the widening of the gap in incomes per person, production in the developing countries is growing faster than that of the developed countries. (The explanation for this derives from the faster population growth rates in developing countries.) As a result, the developing world is projected to contri-

Table I : Current account balances, 1970-90

(billions of 1978 dollars)

					High		Low	
Country group	1970	1975	1978	1980	1985	1990	1985	1990
Oil importers	–18.5	–49.8	–25.5	–52.7	–49	–60	–41	–43
Low income	–3.5	–7.0	–5.1	–8.6	–12	–15	–8	–9
Middle income ..	–15.0	–42.8	–20.4	–44.1	–37	–45	–33	–34
Oil exporters	–4.7	–3.2	–17.6	4.1	–5	–14	–7	–12
All developing countries	–23.2	–53.1	–43.1	–48.6	–54	–74	48	55
Capital surplus oil exporters*	6.0	39.7	18.8	85.1	(57)	(35)	(55)	(16)
Industrial market economies*	25.9	28.4	29.9	–24.5	(12)	(55)	(8)	(55)
Nonmarket industrial economies and China ..	3.4	–9.0	–0.2	–0.1	–3	–4	–2	–3
Statistical discrepancy ..	–12.3	–6.0	–5.4	11.9	–12	–12	–13	–13

Note : Excludes official transfers.
a. These projections are subject to particular uncertainty.

Excerpts from the World Development Report : 1981 *released by the World Bank on August* 10.

bute about 20 per cent of world GDP by 1990, compared to only 15 per cent in 1970. Furthermore, it is expected to contribute about 26 per cent of the increase in world production between 1980 and 1990 (High case). By 1990 its exports will constitute 25 per cent of total world trade and will account for 26 per cent of the increase in world trade between 1980 and 1990.

Balance-of-payments patterns

Throughout the 1980s the developing countries are expected to have current account deficits that are relatively large in real terms although they will decline as a percentage of GNP. Such deficits, of course, depend on the creditworthiness of developing countries and their access to capital markets. Between 1980 and 1985 the oil exporters are likely to move from small surplus to deficit, and then remain there. Conversely, the industrial countries are projected to turn a small deficit in 1980 into a sizable surplus by 1990. Their growing surplus is offset by a decline in the surplus of the capital-surplus oil exporters, from $ 85 billion in 1980 to between $ 16 billion and $ 35 billion (in 1978 dollars) by 1990.

World trade grew by an average of 5.7 per cent a year in the 1970s, after almost 8 per cent a year in the 1960s. Despite this slowdown of the growth of total trade, developing-country nonfuel exports grew faster — over 7 per cent a year in the 1970s, as compared with 5 per cent in the 1960s. This expansion of trade has provided developing countries an avenue for growth and industrialisation, and, for the oil importers, a source of earnings to meet their increasing fuel costs.

Trade in the 1970s

The most striking changes in the pattern of world trade during the past 10 years have resulted from the increase of fuel prices. World trade in fuels increased from $ 29 billion in 1970 to $ 535 billion in 1980, or from 7 per cent of world trade to 21 per cent.

That 14 percentage-point increase is considerably larger than the Federal Republic of Germany's or the United States' share of world trade. Even excluding the (relatively small) increase in volume, paying for the 1970s' fuel-price increases was therefore equivalent to finding the money to buy all the exports of another United States or Federal Republic of Germany.

Because their exports were expanding rapidly, many of the middle-income oil importers were able to reduce their current account deficits to levels financeable in the medium term, without sacrificing their growth. Between 1973 and 1978, the industrial countries increased their exports to the oil exporters by enough to cover some two-thirds of the extra cost of their imported oil. Only the low-income oil importers did not reap significant benefits from international trade. Many of them reduced their current account deficits by curbing imports (and hence growth) rather than by expanding exports. Increased aid helped others finance their larger deficits.

The developing countries play an increasingly important role in world trade. They will account for nearly 30 per cent of the increase in world trade between 1980 and 1990. They purchase 38 per cent of EEC exports outside the Community; of this total, half are purchased by oil-exporting countries and half by oil-importing countries. The United States sells 36 per cent of its exports to developing countries; a third of these go to the oil-exporting and two-thirds to the oil-importing countries. For

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Workers' remittances

REMITTANCES from their nationals working abroad yielded about $ 24 billion to the developing countries in 1980. Migrant workers have been mostly concentrated in Europe and more recently in the Persian Gulf area. Major beneficiaries among developing countries of remittances from Europe have been Yugoslavia, Turkey, Portugal and Morocco, Migrant labourers employed in the Gulf states have come mainly from other Arab countries (Egypt, Jordan, Syria, the Yemen Arab Republic and the People's Democratic Republic of Yemen) and from South Asia (India, Pakistan and Bangladesh) although increasing numbers have come from East Asia.

Remittance inflows to major labour-exporting countries, 1978

Country	Amount (millions of dollars)	Remittances as a percentage of merchandise exports
Yugoslavia	2,938.0	51.8
Turkey	1,011.6	44.5
Portugal	1,688.9	60.5
Morocco	762.5	51.3
Egypt	1,761.6	88.8
Bangladesh	115.1	21.0
India	**1,238.6**	**17.8**
Pakistan	1,303.3	92.9
Jordan..	520.2	175.4
Yemen, PDR.. ..	257.7	*
Yemen, AR	1,277.0	*
Upper Volta	65.9	59.6
Mali	31.1	33.0

In these countries, remittance inflows are almost the only source of foreign exchange earnings

The level of remittances is closely related to the number of migrant workers abroad and their wages, as has been observed in countries such as Greece, Yugoslavia and Turkey. In the case of the countries supplying labour to the Gulf states, migrant workers seem to remit more the lower their occupational level. Even though the propensity of unskilled workers to remit usually remains high because they do not often take their families to the country of employment it tends to fall over time as the basic needs of their families are met and their own local expenses increase.

Some labour-exporting countries have had special schemes to attract remittances from their workers abroad. But recent research shows that such incentive schemes do not appear to have any significant impact on total remittances although they may lead to some reallocation of savings.

The experience of Europe has demonstrated that there is a limit to the number of foreign workers that a society will wish to allow. Many countries have put severe restrictions on foreign labour and have attempted to "stabilise" their migrant labour force. Although these measures are frequently attributed to recession and the difficulties of 1973-75, the timing of the beginning of these restrictions shows that they preceded the oil price rise. On the other hand, there has been a process of "maturing" of the migrant population. Despite original intentions to import labour only, even the countries with the strictest immigration laws found that migration had taken on a circulatory character: some workers returned, many had acquired permanency status and the age-sex composition of the migrant population was beginning to approach normal profiles.

The Middle Eastern countries are going through a similar experience. The problem is more acute in this region; in no other country is the proportion of foreigners in the labour force as large. Nevertheless, the outlook for increasing the volume of migrant labour in the Middle East in the near future may be slightly better than in Europe because the economies of the labour importers in this region are crucially dependent on migrant labour, and because Iraq and Saudi Arabia have not yet reached the same relative levels of non-national populations as Kuwait and the Gulf states. In the longer term, however, the prospects for increased employment of migrant labour do not appear bright in this region either. Therefore, unless new "poles" of immigration develop, labour exporters are likely to find that remittance flows will not grow at the same rates as in the past.

Japan the relevant figures are 46 per cent to developing countries, with 14 per cent going to oil exporters and 32 per cent going to oil importers. In manufactures trade as a whole, the industrial market economies had a surplus of $ 34.5 billion with the developing countries in 1978.

The developing countries increasingly act as an "engine of growth" for the rest of the world. While the main transmission of economic activity is still from the industrial to the developing countries, the reverse effects are not negligible. Some estimates suggest that an extra percentage point on the growth rate of developing countries would raise industrial countries' growth by about 0.1 to 0.2 per cent. Another study calculated that, by sustaining their imports in the mid-1970s while the rest of the world's slowed down, the middle-income countries had an impact on the industrial countries equivalent to a significant reflation of the economy of the Federal Republic of Germany. They prevented the recession in the industrial world from becoming even worse than it was.

Energy

World demand : Before 1973 energy consumption was growing proportionately to GDP in the industrial countries, somewhat faster in the developing countries. Even so, the latter now account for only 14 per cent of world commercial energy demand; a quarter of their total energy is still supplied by fuelwood and other non-commercial sources. After 1973 consumption in the industrial countries grew far less rapidly. While growth in these countries has recently recovered, it is projected to be slower than pre-1973 levels throughout the 1980s, and slowest of all country groups. In the developing countries, demand has also slowed down, but not as much. As a result, their share in total consumption will rise to 18 per cent by 1990.

External finance

In the 1960s and early 1970s foreign capital financed 10 to 20 per cent of total investment in developing countries. Most of these flows came from official or semi-official sources in the form of grants, concessional loans and market loans. Private finance consisted largely of suppliers' credits and direct foreign investments.

Even before 1970, this pattern was gradually changing. The contribution of private bank lending increased rapidly after 1967 while workers' remittances though conventionally classified as "current receipts") also became an important tem of external finance for several countries in Southern Europe and North Africa. Dramatic changes occurred in 973-75 when the developing countries had to borrow to cover their much enlarged current deficits.

The wider financing gap was bridged initially by extra aid from industrial countries, more lending by international financial institutions and depletion of reserves. But the various channels through which the oil exporters' surpluses were recycled became increasingly important. Oil producers increased their aid; remittances from migrant workers in the Middle East became a significant source of foreign exchange for many countries; there was a spectacular increase in commercial bank lending to the middle-income countries.

When the developing countries' trade deficits rose sharply after 1973, the international community responded with great urgency, and with particular concern to the needs of those countries identified as "most seriously affected". OECD donors increased their aid by 52 per cent in two years, from a historically low 0.29 per cent of their GNP in 1973 to 0.36 per cent in 1975. OPEC members increased their aid even more rapidly; it rose to $ 5.5 billion in 1975, 27 per cent of all Official Development Assistance (ODA).

The International Monetary Fund (IMF) arranged two oil facilities to help recycle surpluses accumulated by OPEC and some OECD economies. An interest subsidy reduced the cost of finance to low-income countries. The multilateral banks increased their commitments by 46 per cent in 1974 and 21 per cent in 1975. In addition, both bilateral and multilateral agencies expanded the share of programme lending and other fast disbursing aid. Thus, between 1973 and 1975 Official Development Assistance received by the low-income countries had increased by 60 per cent in real terms. Middle-income oil importers financed their enlarged deficits by borrowing at commercial terms.

Although the international response to the difficulties of 1973-75 was encouraging, during the second half of the 1970s ODA receipts grew slowly; in the case of the low-income oil importers, they actually declined in real terms. By 1980 ODA from the OECD countries was little higher as a proportion of their GNP than it had been in 1975, and only about half of the 0.70 per cent of GNP most of them had accepted as a target. Their

Table 2: Composition and growth of world merchandise trade, 1970-80

(values in billions of current dollars)

Item	Total merchandise	Fuels	Nonfuel primary products	Manufactures	Gold
Value, 1980	2,133	535	400	1,170	27
Percentage of total	100	25	19	55	1
Increase of value 1970-80	1,818	507	312	973	26
Percentage of total increase	100	28	17	54	1
Higher prices as a percentage of increase of value	87	98	82	81	101
Percentage increase of volume, 1970-80	74	29	64	96	4

Table 3 : Developing countries' outstanding debt, 1970-79

(Percentages)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Indicators										
Debt service ratio ..	8.9	9.2	9.0	8.8	7.1	8.4	8.4	9.5	12.4	12.6
Interest service ratio ..	2.8	2.9	2.8	2.7	2.4	3.2	3.3	3.5	4.2	4.8
Capital service ratio a ..	14.5	14.5	13.4	13.4	11.1	11.9	11.5	12.9	15.5	15.0
Debt/GNP (percentage)b	12.3	13.1	13.5	13.1	12.6	13.9	15.5	17.0	18.3	17.8
Debt/exports (percentage)b	80.1	85.2	81.8	70.0	59.6	72.1	75.6	79.6	86.6	78.3
Debt/reserves (percentage)b	263.7	239.9	183.2	153.9	143.5	193.9	204.6	214.5	217.3	176.4
Interest service/GNP(percentage)b	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.9	1.1
Memo item										
Total public debt outstanding and disbursed, all included countries (billions of dollars)	50.4	59.3	69.3	84.8	105.5	128.4	159.1	198.9	251.7	294.4

Note : Includes all developing countries that report to the World Bank's debt reporting system except: (1) the capital surplus oil exporters; and (2) countries for which complete and reliable time series data are not available (Afghanistan, Bahrain, Botswana, Burundi, Comoros, Guinea, Iran, Iraq, Lebanon, Lesotho, Liberia, Maldives, Nepal, Papua New Guinea, and South Africa):

a. Contractual service payments on long term debt, plus remitted profits on direct investment divided by exports of goods and services.

b. Debt outstanding and disbursed.

collective performance is heavily influenced by the disappointing record of the largest donor. In 1980 their aid was 0.43 per cent of their GNP, excluding the United States (0.27 per cent of GNP). Sweden, Norway, Denmark and Netherlands exceeded the 0.70 per cent target.

The share of non-OECD countries in total ODA increased during the 1970s but it reached its peak (33 per cent of the total) in 1975. Most of this came from the capital-surplus oil exporters. As oil surpluses declined, OPEC's share in total ODA also fell, to 18 per cent, in 1979, but rose to 20 per cent in 1980. Capital-surplus oil exporters are now contributing 3.1 per cent of their GNP for aid. Aid from the non-market industrial economies is negligible, 0.12 per cent of their GNP.

The direct effect of rising oil revenues on the exports of the developing countries was small, but some developing countries, most of them among the poorest, benefited from the oil exporters' increased economic prosperity through the export of labour and the corresponding inflow of remittances. Total remittances to the developing countries, mainly from Europe and from the Gulf countries, rose from about $ 3.5 billion in 1970 to $ 24 billion in 1980 — $ 2 billion more than the developing countries' total ODA receipts, and equivalent to about 13 per cent of the major recipient economies' merchandise exports, and for some, much more.

Direct foreign investment, which constituted about 20 per cent of the net capital flows to developing countries in 1970, has grown less rapidly than other forms of external capital. Investment increased sharply in the early 1970s, responding to the commodity boom and to more favourable policies towards foreign investment in many middle-income countries. But the spurt was short-lived; after 1975 foreign equity investment did not even keep up with inflation. However, with the expansion of commercial bank lending, the form of foreign investment in developing countries itself changed. Intracompany loans supplemented equity participation. The financing needs of transnational companies were covered increasingly from sources other than the parent company, such as borrowing from local banks or the Eurocurrency market.

Private commercial bank lending was the component of external finance

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India: More demanding adjustment

GNP grew in India by an average 3.4 per cent a year in 1964-73; it then accelerated to 4.3 per cent a year in 1974-79, despite the sharp rise in oil prices. This considerable achievement can be attributed to both short- and long-term factors. The most significant change was in :

Agriculture : In the past four years, India has imported hardly any foodgrains, and built its stocks up to unprecedented levels. As a result India was able to manage the consequences of a severe drought in 1979 without resorting to significant foodgrain imports. Over the 1970s as a whole, foodgrain production rose at an average of almost 3 per cent a year, compared with population growth of 2.2 per cent a year.

While the weather is still a major factor in Indian agriculture, the spread of irrigation and modern farming techniques has provided greater security. So far the biggest difference has occurred in wheat farming in the north-western states of Punjab, Haryana, Uttar Pradesh and spreading eastward into West Bengal. But fertiliser use and high-yielding varieties of seeds are starting to affect rice as well, and this has particular relevance for some of the poorest states in the east and south of the country.

By virtually ending foodgrain imports, India has saved substantial amounts of foreign exchange, helping it to pay for more expensive oil without curbing other imports. It also received the benefits of migrants' remittances.

Migrants' remittances : In the mid-1970s, the number of Indian workers in the Gulf states increased considerably. Their annual remittances rose from less than $ 250 million in 1974 to an estimated $ 2.4 billion in 1980.

The combination of increased remittances and savings on grain imports allowed India to run a current account surplus in the three years 1976-77 to 1978-79. As a result, India's foreign exchange reserves rose to a peak of over $ 7 billion in 1979. By 1977 the government was able to take advantage of this situation by relaxing some import restrictions on.

Industry : India's policy of import substitution has produced a diversified industrial base. Investment has risen substantially and has been financed by domestic savings for most of the past 20 years. Yet in industry at least, extra investment has not produced more rapid growth. Since the mid-1960s, industrial growth has slowed. This can be attributed partly to a sluggish rise in domestic demand and the fact that Indian industry has benefited little from the scale economies of exporting to world markets. In addition, industrial licensing has restricted the entry of new firms into some industries and, in others, limited the expansion of existing firms. But a more significant cause has been supply constraints at home, in particular.

Infrastructure : During the 1970s power shortages have become chronic. They are less the result of inadequate capacity than of the poor performance of existing capacity, itself due to input shortages compounded by maintenance and management failures. On government estimates, electricity shortfalls averaged 12 per cent a year between 1975 and 1980. As a direct result, GDP may have been cut by 2 per cent a year.

The power industry has also been hit by shortages of coal. In the three years 1977-78 to 1979-80, coal production stagnated although it picked up again in 1980-81. Constraints on railway operation through such factors as labour disputes and power shortages have also restricted the movement of coal that was produced. Failings in these three infrastructural cornerstones — coal, power and transport — have all been interconnected.

Official policy aims to correct all these domestic constraints. Licensing requirements have been eased, allowing companies in core sectors to expand their capacity by 5 per cent a year for five years. Export production has been exempted from licensing restrictions for all units, while units exporting all their output will be exempt from all import controls and duties, will receive favourable tax treatment and will not be subject to prevailing laws on foreign participation. As for infrastructure, the Sixth Plan (running up to 1985) provides for much increased investment in coal, power and railways.

In the short term, these changes can do little to ease the scarcity of foreign exchange that has developed in 1980 and 1981. Almost 45 per cent of India's import bill in 1980-81 was accounted for by oil. Migrant remittances are unlikely to grow as rapidly as they did in the 1970s. Nor is aid, which played an important role in cushioning the balance of payments after the 1973-74 oil-price increases. India is, therefore, facing a more demanding adjustment than before Nevertheless, if it continues its agricultural progress, adopts more outward looking trade policies, improves the infrastructural support for its industry, and continues to receive external support fo its development effort, India should be able to restore its external position without seriously slowing down its growth.

that grew most rapidly, from about $ 4 billion in 1970 to $ 36.1 billion in 1980. By the end of 1980 the outstanding debt of the developing countries to private sources of market capital had reached $ 284 billion, up from $ 32 billion in 1970. Most of this increase came in the form of syndicated bank loans with floating interest rates. The system of floating rates — expressed as a margin above the London Interbank Offered Rate (LIBOR) — enabled the banks to offer longer maturities without exposing themselves to the risks of changes in short-term rates of interest. In contrast borrowing in the bond market did not expand. Only in 1977 and 1978 did the oil importers borrow a significant amount through bond issues. Since 1977 most new bond issues by developing countries have been in the form of floating-rate notes, which are financially very similar to syndicated loans from the viewpoint of both lenders and borrowers.

Commercial bank lending to the developing countries was concentrated almost totally in the middle-income countries; the low-income oil importers did not borrow more than $ 630 million (net) from the private banks in any year. Among the middle-income countries the largest borrowers were oil exporters (Mexico, Venezuela and Algeria) and upper middle-income countries (Brazil, Spain, Argentina, Yugoslavia and South Korea). These eight countries accounted for 60 per cent of total bank debt outstanding in 1979.

Food subsidies: Three cases

The benefits and costs of food subsidy schemes depend on several factors, including the income level of beneficiaries, the stage of development of the country (particularly its agriculture) and the vulnerability of the scheme to budget constraints.

Food subsidies can contribute to a vicious circle of declining producer incentives and budgetary pressure. In Zambia, for example, officially controlled consumer prices for food have risen more slowly than other prices. From 1976 to 1980, a period of severe economic crisis, maize and fertiliser subsidies increased from 10 to 20 per cent of the recurrent budget. Even so, producer prices have been below import prices. The subsidy has primarily benefited urban consumers, who are better off than most farmers, especially those in remote areas. Weak producer-incentives in turn have reduced the amounts marketed through official channels. A black market has developed where consumers pay prices far higher than import prices. (In 1981, however, the government increased maize meal prices by over 30 per cent and reduced subsidies).

Food management in several South Asian countries features a complex of procurement, storage, rationed distribution, commercial imports, food aid, export bans and numerous pricing and movement interventions. Although these systems are generally costly, the balance between their costs and benefits varies greatly with the country, the coverage of the system, the choice of subsidised foodstuffs, eligibility criteria, purchasing conditions and selection of ration shop locations.

In India, for example, where wheat, rice and coarse grains are sold in ration or fair-price shops, public intervention seems an effective way of reaching the poor, despite the administrative difficulties. Increases in procurement prices, to reflect rising import costs, have been passed on to consumers. As a result, the subsidy has been kept within manageable limits and budgetary pressures have posed little threat to its survival.

Several middle-income countries have succeeded in directly attacking malnutrition through targeted food distribution systems. Colombia's food coupon scheme, introduced in the mid-1970s, is modest in scale, reaching about 140,000 households and costing less than 0.1 per cent of the Central Government's current spending. The coupons are disbursed to farmers in poorer regions and can be redeemed for a limited variety of protein-fortified foods.

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BOOKS & IDEAS

In cause of rural development

Directory of Organisations Involved in Rural Development and Appropriate Technology

Edited by S. S. Lodha,

Published by Centre for Rural Development and Appropriate Technology. Indian Institute of Technology, Hauz Khas. New Delhi 110 016; Pages 92; Price not mentioned.

Projects on Rural Development and Appropriate Technology

Compiled and edited by T. Karunakaran

Published by Centre for Rural Development and Appropriate Technology, Indian Institute of Technology, Hauz Khas, New Delhi 110 016; Pages 56; Price not mentioned.

Indian scientists and engineers are often blamed for getting themselves engaged in "glamourous" lines like nuclear and space research ignoring the more relevant questions of a technology for rural development. It is true that Indian space and nuclear research, costing crores of rupees, command wider attention at least in the press here and abroad but quite a sizable number of scientists and engineers and the institutions in which they are working have shown an awareness of the responsibility cast on them that their primary duty is to bring an improvement in the village life. At least the Centre for Rural Development and Appropriate Technology, Indian Institute of Technology, New Delhi, has shown through these two publications that a scientific approach is being made towards bettering the living conditions of villages and that quite a variety of organisations, including scientific institutions and industrial houses, besides philanthropic bodies, are engaged in the task. That their efforts so far have not been able to make a dent in rural poverty is an acknowledged fact. Neither has planning. It makes the challenge ahead much more exciting and the two publications providing a list of organisations engaged in the rural development and the research in various branches that is in progress should facilitate the task of those who have devoted themselves to this cause. With financial resources as well as organisational and scientific resources limited it is imperative to ensure that there is no overlaping of and as a consequence wastage of efforts. The two publications could ideally serve that purpose.

It is interesting to know, as the directory brings out, that there are as many as 490 organisations involved in rural development programmes and even the smallest state or union territory has two or three of them. Additionally 49 industrial enterprises have been listed as engaged in this work, not necessarily in the area in which their headquarters are located. It may seem odd that comparatively industrially developed states such as Maharashtra, West Bengal, Tamil Nadu, Gujarat and Karnataka should have more of these institutions than poor and backward states like Orissa and Bihar. For instance, Maharashtra has as many as 73 of them, Gujarat 47, West Bengal 41, and Tamil Nadu 36 as against Madhya Pradesh's 16, Bihar's 39, and Orissa's 31. But then the organisational and financial resources can be mobilised better in the industrialised states than in the backward states. The directory not only gives a comprehensive list of the institutions working for rural development but also their line of activities. Of course some of these institutions such as Bharatiya Agro-Industries Foundation, Kora Kendra, Central Food Technological Research Institute are familiar names. But others have not been generally in the picture. It is hoped however that all of them are active and making a sincere endeavour in the cause of rural development.

The Director of IIT, Delhi, Mr O. P. Jain, emphasises in his foreward to the second publication that a major breakthrough in technology is needed if an improvement is to be brought in the quality of rural life. More productive agricultural techniques, promotion of family village industries, better houses, better roads and clean drinking water are matters which require immediate attention. And this is only possible, he says, when institutions which are engaged in the pursuit of higher science and technology take up these challenging tasks. The editor, Mr T. Karunakaran, explains that the present report represents an attempt to evolve a framework to appreciate a newly emerging inter-disciplinary area called rural development and appropriate technology. As such not only the on-going projects are listed but additional projects, some of which might be taken up by the centre in future, are also mentioned. In fact, he says some of the fields and topics might have also been undertaken for investigation by other institutions working in the field of rural development.

In 11 chapters titled Basic Needs, Health Care, Calamity Mitigation, Agricultural Activity and Animal Husbandry, Agro-products Processing Technology, Agro-wastes, Industrial and Other Gainful Activities, Resources and Energy, Transportation and Communication, Management and Systems Aspects, Human Skill Development and Quality of Life, not only details of projects in progress are given but also future lines of investigations are suggested. Thus, the second publication serves as a useful and good supplement to the directory of organisations involved in rural development.

D. B. Mahatme

Puzzle of distribution of national income

The Share of Wages in National Income

By Ashok Mitra,

Oxford University Press, Calcutta; 1980; *Price Rs* 75.

The author of the book is at present the Finance Minister in the CPI-(M) Government in West Bengal. He is marxist by persuasion but he has brought an objective outlook on this very important subject of the economic theory. This is clear from his criticism of Marx's theory of increasing misery of the proletariat as too categorical. "He was certain that the relative share of labour will continue to decline in capitalist societies over time. Facts have proved otherwise; . . ." He adds: "In spite of all our admiration for Marx's meticulous macrodynamics, we must travel further for a more perfect theory of the distribution of national income."

As the author explains in the preface the present publication is a reprint of the book published in 1954. Only a limited number of copies were then published and the book ceased to be available after a few years. It was therefore considered desirable to reprint it 'as it deals with one of the major conundrums in macro-economic theory—the relative shares of factors — on which little literature exists'. The main purpose of the book is to examine critically Kalecki's theory of income distribution which the author describes as a tautology. It is based largely on the concept of the degree of monopoly which according to the author is only an intermediate concept and does not concern itself with the basic variables that regulate the processes in an economy."

"To illustrate his point and to indicate the direction in which an alternate theory could be developed the author examines the twin mechanism in Kalecki's model of income distribution, namely, the degree of monopoly and the price of basic raw materials. This could suggest that an increase in the degree of monopoly should reduce the relative share of manual labour and *vice versa*. But the four variables involved in Kalecki's analysis, namely, aggregate wage bill, aggregate raw material cost, aggregate home produced national income and the degree of monopoly in the economy as a whole cannot be accommodated in any single formula without getting involved in tautology and so Kalecki's explanation is vitiated by the fault of begging the question. As the author puts it, "Instead of showing that the relative shares have remained unchanged (in Britain between 1880 and 1913) because of the stability of degree of monopoly, he refers to the stability in the degree of monopoly from the fact of currency in relative shares."

The author examines the statistical techniques employed by Kalecki in his analysis and seeks to establish that their imperfections are due to 'his failure to develop a quantifiable measure of the degree of monopoly'. To correct this plan the author has suggested an alternative approach. He uses the tools developed by him to arrive at different statistical results. He, however, warns the reader that his emphasis could be more in economic logic than on statistical findings. Citing what he calls indirect evidence of the presence of market imperfections the author concludes that attempts to build afresh a perfect market model would not lead us very far. He, therefore, suggests an approach that should not take us away from Kalecki but rather beyond his analysis.

He starts with a single model with the main variables like labour and import quotas, the rate of depreciation, the wage price rate, the number of competitors in the market at 'the zero demand price'. He tests his model by combining data of income distribution in the UK 1870-1938 and seeks to produce an explanation for the long-term stability in national income distribution in the British economy. In the process he has tried to argue that the role of raw materials prices, determining variable in Kalecki's model, is reverse of what Kalecki had mplied. A rise in price raw materials in he author's model will increase and not ower the wage share as argued by Kalecki. As for the other determining variable, namely, the money wage rate could be ignored because of demand regularity.

The author admits that there could be other variables. He says : "Once the socio-historical process is explicitly taken into account, we have to admit that income distribution between classes merely mirrors the different economic, political and organisational capabilities of the classes who share out the national income". But the author concludes by agreeing with Joan Robinson that "If there is any law governing the distribution of income between classes it still remains to be discovered."

Thus in spite of the best efforts of the scholars to perfect the tools of analysis and economic logic the puzzle of distribution of national income remains unsolved posing further challenge to the academicians.

Rohit Dave

Dangerous trend towards big government

GOVERNMENT activity has been expanding by leaps and bounds in all the western industrialised countries. It shows up in a number of different indicators. For one the percentage of GNP accounted for by government consumption of goods and services in four leading western countries rose from about four per cent to about 16 per cent in the 100 years between 1860 and 1960. This trend has continued unchecked in all the western democracies.

In an article titled "The dangerous trend towards big government", in *Prospects*, published by the Swiss Bank Corporation, Prof Peter Bernholz of Basle University, discusses how to reverse this trend. He writes: "In present-day democracies, legislatures have the right to deal with any matters they wish (barring a few exceptions stipulated in the constitution) and to decide these issues by a simple majority. This arrangement has paved the way for increasingly far-reaching official intervention and the uncontrolled growth of government. It would be possible to halt this trend or turn back the clock somewhat by setting up constitutional limits on government activity. In that case, however, it would be necessary to require, say 2/3 or 3/4 majority of the legislature or the voters to amend the constitution, rather than just a simple majority.

"The first constitutional limitation to consider would be a prohibition on all direct government interference, such as erection of import barriers, setting of price floors or ceilings, granting of price subsidies, etc except under certain precisely defined conditions. An example of such conditions might be instances of dumping by foreign cartels or state trading monopolies. In no case, though, should profit levels or the employment situation in a given business sector justify an exception.

"Second, the constitution should forbid the state production or delivery of goods that are basically of a private nature. Third, the present system of compulsory old-age and medical insurance could be made unconstitutional and replaced by a negative income tax.

"Constitutional restrictions on the decision-making latitude of democratically elected officials can eliminate only some of the reasons behind expanding governmental activity. Competition between political parties can lead to inefficiency in the delivery of public and utility services or their oversupply, for several reasons : rising tax revenues just "happen" in a growing economy; those who benefit from certain public services are not required to bear the costs in the form of higher taxes or fees; and the bureaucracy tends to promote expansion of government activity and inefficiency through its information policy and its collaboration with special-interest groups.

"Obviously it is not yet possible to work out adequate and useful proposals for the elimination of all causes of inefficiency and potential oversupply of services by the government apparatus. Nor must the proposals made at this point necessarily be the best possible ones. Moreover, when it comes to implementing these proposals, the problem still remains of how the proposed constitutional changes could be achieved at all under prevailing political conditions.

"As for the problem of bureaucracy, the first thing to realise is that restricting the level of government activity would automatically limit the size of the bureaucracy and the leverage brought to bear by special-interest groups."

BOOKS RECEIVED

Commodity Trade Staitstics 1979—Statistical Papers, Series D, vol xxix, No. 1-9, United Nations Publications which may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 259; Price $US 4.00.

Commodity Trade Statistics 1979—Statistical Papers, Series D, vol xxix, No. 1-11, United Nations Publications which may be obtained from : United Nations Sales Section, New York or Geneva; Pages 251; Price $US 4.00.

Commodity Trade Statistics 1979—Statistical Papers Series D, vol xxix, No. 1-12, United Nations Publications which may be obtained from : United Nations Sales Section, New York or Geneva; Pages 259; Price $US 4.00.

Population and Vital Statistics Report --Data available as of 1st April, 1980, Statistical Papers Series A, vol xxxii, No. 2, United Nations Publications which may be obtained from : United Nations, Sales Section, New York or Geneva; Pages 21; Price $US 4.00.

CORPORATE SECTOR

In the market

J. K. Synthetics

J. K. Synthetics Ltd (Regd Office : Kamla Tower, Kanpur 208 001, UP) entered the capital market on August 10 with a public issue of 5 lakhs secured redeemable debentures (second series) of Rs 100 each carrying interest at 13.5 per cent per annum and of a total value of Rs 5 crores. Explaining the objectives behind the issue, Mr Sohanlal Singhania, a director of the company, told newsmen in Bombay that the issue would provide long-term working capital needs of the company. The company was in the process of strengthening its capital base in view of the various schemes being undertaken by it. These included expansion of polyester filament yarn capacity by 6,000 tonnes annually, expansion of polyester staple fibre capacity by 6,000 tonnes annually, increase in nylon tyre cord fabric capacity by 1,960 tonnes and of tyre cord yarn by 1,400 tonnes, and two new projects for cement—one for white cement with a capacity of 50,000 tonnes annually and the other for portland cement at Nimbahera with an annual capacity of 420,000 tonnes.

Mr Singhania said that the company had a steady record of good performance over the past few years and the net worth of its equity share was Rs 38.39 in 1980 as against Rs 27.92 in 1977. The turnover in 1980 was about Rs 170 crores and was expected to rise to Rs 200 crores this year. His optimism stemmed from the fact that power position in Rajasthan had improved considerably and the plant was working at full capacity. The company had maintained consistency in dividend at 18 per cent over the years 1978-80. The debentures were fully secured, easily liquidable and moreover the company would offer to buy back these, at holder's option, at par provided the debentures have been held for three years and individual holdings did not exceed Rs 25,000. In view of these benefits, Mr Singhania felt that investors in debentures being offered now would stand to gain immensely in the future.

Vidula Chemicals

Vidula Chemicals & Manufacturing Industries Ltd (Registered Office : 7-E, Neelamber Building, 28-B, Shakespeare Sarani, Calcutta-700 017) is offering for public subscription at par 2.70 lakh equity shares of Rs 10 each totalling Rs 27 lakhs. The subscription list will open on August 19 and close on August 29 or earlier but not before August 21.

The company is setting up a plant at Gopalpur-Chandigarh in 24 Parganas district in West Bengal for the manufacture of 16,500 tonnes per annum of sulphuric acid.

Madras Elastomers

Madras Elastomers Ltd (Registered Office : 101, St. Mary's Road, Madras-600 018) is offering for public subscription at par 265,800 equity shares of Rs 10 each totalling Rs 26.58 lakhs. The subscription list will open on August 17 and close on August 29 or earlier but not before August 19.

The company is setting up a project at Maraimalainagar in Chingleput district, Tamil Nadu, for manufacturing 7,200 tonnes per annum of carbon black master batches and metal bonded elastomers.

Kamdhenu Engineering Industries

Kamdhenu Engineering Industries Ltd (Registered Office : 5, Ramkumar Rakshit Lane, Calcutta-700 007) is offering for public subscription at par 1.45 lakh equity shares of Rs 10 each totalling Rs 14.50 lakhs. The subscription list will open on August 17 and close on August 22 or earlier but not before August 20.

Other developments

Bowreah Cotton : Sales rise

Sales of Bowreah Cotton Mills Company Ltd for the year ended December 1980 increased to Rs 22.31 crores from Rs 16.08 crores in the previous year. The net profit, after providing Rs 97.81 lakhs (Rs 72.27 lakhs) for interest payments, and Rs 54.84 lakhs (Rs 45.43 lakhs) for depreciation, amounted to Rs 61.21 lakhs (Rs 67.73 lakhs). The equity dividend recommended for the year under review is 15 per cent (17.5 per cent) payable on the higher capital resulting from issue of 1 : 2 bonus shares made in January 1981. An amount of Rs 25. lakhs (Rs 36.79 lakhs) is transferred to investment allowance reserve and Rs 18 lakhs (Rs 21 lakhs), to general reserve. Production of cloth during the year under review was 18.29 million metres (13.93 million metres) and that of yarn was 3,332 tonnes (2,241 tonnes). Production of waste was 727 tonnes (512 tonnes). Capital expenditure incurred during the year under review was Rs 1.41 crores.

Kanoria Chemicals : Bonus shares proposed

Kanoria Chemicals & Industries Ltd has reported higher sales for the year ended March 1981 at Rs 36.70 crores compared to Rs 32 crores in the previous year. The net profit, after providing Rs 1.12 crores (Rs 1.22 crores) for interest payments, Rs 88.18 lakhs (Rs 73.08 lakhs) for depreciation and Rs 81 lakhs (Rs 1.05 crores) for taxation, amounted to Rs 1.89 crores (Rs 1.23 crores). The equity dividend recommended for the year under review is 12 per cent (same). An amount of Rs 42.50 lakhs (Rs 27.40 lakhs) is transferred to investment allowance reserve and Rs 1.45 crores (Rs 91 lakhs) to general reserve. The company proposes to issue 1 : 2 bonus shares subject to necessary approvals.

Production of caustic soda during the year under review was 21,070 tonnes (20,057 tonnes) and that of benzene hexachloride was 14,771 tonnes (12,329 tonnes). Production of stable bleaching powder was 5,018 tonnes (6,045 tonnes) and that of salt was 16,370 tonnes (7,118 tonnes). Production of jute goods was 19,497 tonnes (20,689 tonnes). Exports during the year under review were Rs 10.70 crores (Rs 14.58 crores).

Indian Aluminium expertise for Malaysia

An agreement has been concluded between Indian Aluminium Company Ltd and Aluminium Company of Malaysia, Berhad, under which Indian Aluminium will be responsible for technical and engineering know-how and also for supervising and monitoring the construction of a new aluminium sheet and foil rolling complex for Aluminium Company of Malaysia at Kelang in Selangor, Malaysia. The project, which will cost US $ 50 million, will have an ultimate sheet and foil capacity of 24,000 tonnes and 6,000 tonnes per annum respectively. This is the first instance of an Indian aluminium company securing a contract for providing technical and engineering services to an off-shore aluminium company.

Alitalia's FAST cargo reservation

FAST is a system created and developed by Alitalia for the automation of all airline functions relating to freight transportation — from flight space availability control to shipment reservation, from warehouse and documents control to customer assistance. Under a contract signed with Alitalia recently Sita will offer this automated shared cargo service to its airline members throughout the world. The version used by Sita will also include the 'on-line schedule change' developed by Swissair. Sita will provide this service utilising its IBM data processing centre at Paris, interconnecting the airlines joining the system through its worldwide data transsmission network which operates in 156 countries for 241 airlines.

FAST brings many essential benefits to customers. It allows a better use of space availability, a reduction in transit time and a consequent faster delivery of the goods. But most important, it makes available all information on the shipment simultaneously at all connected terminals enabling the shipper and consignee to keep track of the shipment at any stage.

Gold for promise toothpaste

Promise toothpaste, made by Balsara Hygiene Products, has recently won the gold medal in the toothpaste category at the 17th Monde Selections of Beauty and Toilet Products, held in Amsterdam. Competing with leading international brands, it won on the basis of detailed laboratory tests. Promise toothpaste, with its unique clove oil formula has, in a very short span of time, made its mark in India. International demand is fast increasing too and it is already being exported to 15 countries. Negotiations are going on for complete toothpaste plants to be set up by Balsaras in Kuwait, Ethiopia, Sri Lanka and other foreign countries.

Nirlon Synthetic: Bonus shares proposed

Nirlon Synthetic Fibres & Chemicals Ltd has reported higher sales for the year ended March 1981 at Rs 96.67 crores compared to Rs 71.24 crores in the previous year. The net profit after providing Rs 3.77 crores (Rs 3.40 crores) for depreciation and making no provision for taxation (Rs 22 lakhs), amounted to Rs 4.80 crores (Rs 3.51 crores). The equity dividend recommended for the year under review is 22.5 per cent (same). An amount of Rs 1.10 crores (Rs 75 lakhs) is transferred to investment allowance reserve. The company proposes to issue 1:2 bonus shares subject to necessary approvals.

Ductron Castings: Benefits of expansion

Ductron Castings Ltd, which operates a most modern foundry at Hyderabad, expects its sales to increase to Rs 2.09 crores in the year ended March 1981 from Rs 87 lakhs in the preceding year and earn a gross profit of Rs 42.36 lakhs for the year as against only Rs 0.44 lakh in 1979-80. The company expects to maintain equity dividend at 12 per cent. The optimism stems from the fact that the company has completed a modernisation and expansion programme that has taken up its production capacity from 1,000 tonnes to 3,000 tonnes per annum. What is more this programme has cost relatively little. The outlay on the original scheme involving a capacity of 900 tonnes was Rs 36 lakhs. The capacity was raised by 100 tonnes at a cost of Rs 6 lakhs and the recent expansion by 2,000 tonnes has cost about Rs 88 lakhs of which internal accruals accounted for Rs 23.54 lakhs and term loans Rs 64 lakhs. Mr B. G. Sastry, a technocrat who is the brain behind this project, has earned so much goodwill with the financial institutions like Industrial Development Bank of India, Andhra Pradesh State Financial Corporation and Andhra Pradesh Industrial Development Corporation that they came forward readily to liberally assist the expansion and modernisation programme. The company has also set up a full-fledged research and development laboratory and is making constant efforts to develop new products to meet specialised requirements of industries like automobiles, tractors, diesel engines, etc and of railways.

Alkali and Chemical Corporation suffer loss

The Alkali and Chemical Corporation has suffered a heavy loss of Rs 3.56 crores during the first six months of the year ending September 1981, although the sales volume at Rs 29.9 crores is more or less close to Rs 30.88 crores during the corresponding half year of the previous working year and does not compare badly with Rs 72.76 crores for the full working year ended last September. The company had a trading profit of Rs 1.53 crores during its last working year and only Rs 6 lakhs during the first six months of 1980-81.

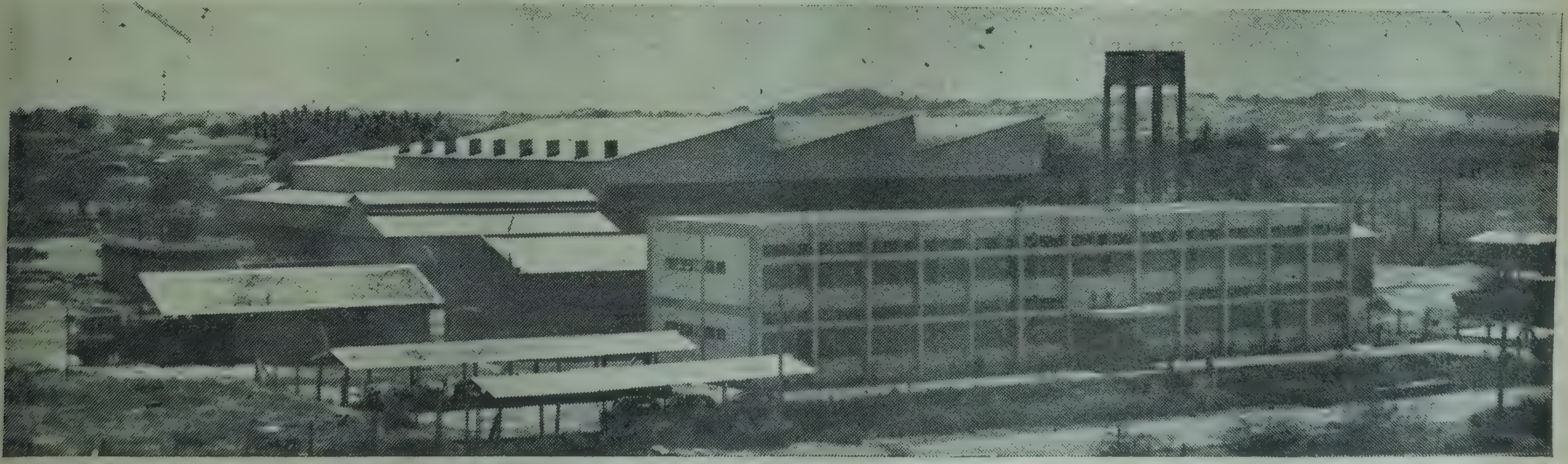
Poor availability of industrial alchohol and doubling of the delivered cost resulting from the increase of as much as 400 per cent in pass fee levied by the UP Government has resulted in the company's loss. The polyethylene plant has remained shut down since the end of last June which is bound to increase the working losses over the current working year.

Forthcoming company meetings

AUGUST 15 TO AUGUST 21

The Indian Card Clothing Co Ltd, Bombay-Pune Road, Pimpri, Pune-411 018. (*August* 20, 12 *p.m.*)

Indo-Asahi Glass Co Ltd, Bengal National Chamber of Commerce & Industry, 23, R. N. Mukerjee Road, Calcutta-700 001. (*August* 21, 11 *a.m.*)



A view of the Ductron Castings factory at Hyderabad

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Apollo Tyres		Ceat Tyres of India		Dunlop India		Falcon Tyres		India Tyres & Rubber Company (India)	
Industry Group	Rubber products		Rubber products		Rubber products		Rubber products		Rubber products	
	Year ended October		Year ended December		Year ended December		Year ended December		Year ended December	
Item	1979	1980	1979	1980	1979	1980	1979	1980*	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	-746.1	-1,262.4	1,281.3	1,421.0	4,126.0	4,204.9	-29.7	142.0	53.3	24.8
(i) Paid-up capital (a+b)	718.6	723.2	445.3	534.3	1,569.1	1,569.7	51.2	58.5	14.0	14.0
(a) Equity	643.6	648.2	445.3	534.3	1,499.7	1,499.7	51.2	58.5	14.0	14.0
(b) Preference	75.0	75.0	—	—	70 0	70.0	—	—	—	—
(ii) Reserves	-1,464.7	-1,985.6	836.0	886.7	2,556.3	2,635.2	-80.9	83.5	39.3	10.8
2. Borrowings (i+ii)	2,638.3	3,278.3	1,154.7	1,505.3	2,149.6	2,294.6	212.2	213.1	61.3	72.2
(i) Long-term	1,258.7	1,230.1	233.2	364 6	262 0	323.2	80.6	68.1	—	—
(ii) Short-term	1,379.6	2,048.2	921.5	1,140.7	1,887.6	1,971.4	131.6	145.1	61.3	72.2
3. Non-current liabilities and provisions	—	—	—	—	—	—	—	—	—	—
4. Current liabilities and provisions	1,081.4	1,312.4	1,896.9	2,907.7	5,799.5	6,540.8	116.4	180.6	315.9	293.6
Assets (at the end of the year)										
5. Gross fixed assets	2,721.9	2,755.0	2,102.0	2,356.5	6,352.1	7,018.6	190.4	309.3	52.5	53.2
6. **Less** depreciation	650.0	915.6	1,142.9	1,280.6	3,008.9	3,335.1	40.4	79.1	27.1	29.1
7. Net fixed assets (5—6)	2,071.9	1,839.4	959.1	1,075.9	3,343.2	3,683.5	150.0	230.2	25.4	24.1
8. Current assets (i+ii+iii)	865.3	1,452 5	3,373.8	4,758.1	8,540.7	9,165.3	131.4	288.0	405.1	366.5
(i) Inventories	508.5	334.9	1,202.9	1,315.2	4,094.2	4,385.4	39.1	72.5	83.6	35.6
(ii) Receivables and loans and advances	286.5	951.3	1,378.2	2,580.1	3,453.6	4,042.9	89.4	201.5	244.3	297.4
(iii) Others	70.3	166.3	792.7	862.8	992.9	737.0	2.9	14.0	77.2	33.5
9. Other assets	36 4	36 4	—	—	191.2	191.5	17.5	17.5	—	—
Total : Liabilities (1 to 4) or Net assets (7 to 9)	**2,973.6**	**3,328 3**	**4,332.9**	**5,834.0**	**12,075.1**	**13,040.3**	**298.9**	**535.7**	**430.5**	**390.6**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,260.1	2,580.6	6,985.0	8,950.5	15,160.8	16,900.2	374.5	795.7	1,072.1	944.1
11. Increase in stock of finished goods and work in progress	140.9	-220.1	6.4	34.8	-116.0	628.2	-4.0	16.6	-28.3	-48.0
12. Value of production (10+11)	1,401.0	2,360.5	6,991.4	8,985.3	15,044.8	17,528.4	370.5	812.3	1.043.8	896.1
13. Other income	3.0	3.1	34.4	103.8	36.3	64.2	2.6	32.1	0.4	0.8
Expenditure										
14. Materials, stores and other mfg. expenses	1,089.3	1,903.5	5,180.9	6,998.7	10,520.3	12816.7	259.1	528.9	909.7	809.8
15. Current repairs	4.5	5.1	32.4	49.7	227.9	336.0	1.0	3.1	0.7	1.2
16. Salaries and wages	109.4	148.6	520.0	609.1	1,668.9	1,794.7	27.1	47.9	40.0	41.1
17. Welfare expenses	7.5	11.5	71.7	91.5	197.7	231.7	1.1	2.7	2.9	3.5
18. Managerial remuneration	—	—	0.4	1.9	1.5	1.1	—	—	—	—
19. Other expenses	132.1	196.7	402.2	452.1	959.8	1,220.2	40.7	87.7	66.1	66.9
20. Depreciation	261.7	265.7	147.7	145.8	311.8	357.2	11.5	25.7	1.9	2.5
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	-200.5	-167.5	670.5	740.3	1,193.2	835.0	32.6	148.4	22.9	-28.1
23. Interest	392.1	365.5	182.0	224.2	313.0	506.9	35.3	65.6	12.3	12.2
24. Tax provision	—	—	245.0	285.1	329.4	0.1	—	—	9.9	—
25. Profit after tax (22—23—24)	-592.6	-533.0	243.5	231.0	550.8	328.0	-2.7	82.8	0.7	-40.3
Appropriations										
26. Dividends (i+ii)	—	—	75.7	90.8	304.5	229.6	—	—	—	—
(i) Equity	—	—	75.7	90.8	299.9	225.0	—	—	—	—
(ii) Preference	—	—	—	—	4.6	4.6	—	—	—	—
27. Profit retained (25—26)	-592.6	-533.0	167.8	140.2	246.3	98.4	-2.7	82.8	0.7	-40.3
Total : Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,404.0**	**2,363.6**	**7,025.8**	**9,089.1**	**15,081.1**	**17,592.6**	**373.1**	**844.4**	**1,044.2**	**896.9**
Operational indicators (per cent)										
(a) Net worth/total net assets	..	..	29.6	24.4	34.2	32.2	..	26.5	12.4	6.3
(b) Inventories/net sales	40.4	13.0	17.2	14.7	27.0	25.9	10.4	9.1	7.8	3.8
(c) Operating profit/net sales	..	..	9.6	8.3	7.9	4.9	8.7	18.7	2.1	..
(d) Operating profit/total net assets	..	..	15.5	12.7	9.9	6.4	10.9	29.7	5.3	..
(e) Profit after tax/net worth	..	..	19.0	16.3	13.3	7.8	..	58.3	1.3	..
(f) Equity earning/equity capital	..	..	54.7	43.2	36 4	21.6	..	141.5	5.0	..
(g) Equity dividend	—	—	17.0	17.0	20.0	15.0	—	—	—	—
(h) Equity dividend coverage. (No. of times)	..	..	3.2	2.5	1.8	1.4	..	..	..	..
(i) Paid-up value per equity share (Rs.)	10.00	10.00	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	7.00	6.75	226.25	207.50	24.80	21.60	8.00	18.25	N.Q.	N.Q.
(k) Gross yield	..	..	7.5	8.2	8.1	6.9	..	..	..	..
(l) Gross fixed assets formation	1.5	1.2	12.0	12.1	12.7	10.5	4.3	...	..	1.3
(m) Debt/eq[illegible]	..	..	0.18:1	0.26:1	0 06:1	0.08:1	..	0.48:1	..	..

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various

EQUITIES

Pivotals recover

Bombay, August 10

After an initial perceptible markdown, pivotals staged a recovery in later dealings. With buying and selling almost evenly matching at the final stage, however, the general trend was a mixed pattern at the end of the week. Activity was moderate and the undertone at the close appeared steady.

There was heavy nervous bull iquidation initially on expectations of drastic changes in the Union cabinet. Equities, however, soon started rallying on further reports that there might not be any changes in major portfolios like home, inance, etc, for the time being in view of the impending monsoon Parliament session beginning on August 17. With no follow-up support at the improved levels, most of the scrips could not re-ain their best rates.

After the previous week's severe etback on reports that the world hipping industry has again star-ed sliding back, shipping shares taged a partial recovery. Apart rom short-covering, the rally vas accelerated by the Govern-nent's decision not to raise the nterest rate on loans to shipping ompanies which seek to acquire ew ships.

Great Eastern Shipping rallied martly from the week's low of s 47.50 to Rs 59. With scatter-d profit-taking at this stage, the crip could close at Rs 56.75, ith a net gain of Rs 3. Scindia lso participated in the recovery nd the scrip gained Rs 2 at s 29.

Century staged a dramatic re-overy from the low of Rs 762 to s 817 before winding up the ession at Rs 813.50 with a new mall gain of Rs 4.50. Standard, owever, encountered violent uctuations on alternate bouts of lling and buying. The scrip oved from Rs 580 to Rs 525, as e buying at the low level help- the scrip to finish at Rs 552. mbay Dyeing, ACC, Tata Steel, LCO, Voltas, Morarjee, Swan, L and Tata Oil lost significant ound on persistent offerings.

In the cash section, Press Metal rdened further by 4 points to 44 on release of a good set of ures and higher dividend of 15 r cent for the year ended rch 1981 against 13 per cent in 9-80.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 1-8-81	High	Low	Closing quotations 8-8-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	245.00	245.00	240.00	245.00
Bombay Dyeing (25)	96.00	95.00	88.00	90.00
Central India (50)	66.00	64.50	59.00	62.00
Century (100)	829.00	818.00	762.00	813.50
Dawn (50)	75.00	75.00	72.00	73.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	112.50	112 50	105.50	112.50
Gokak (100)	209.00	207.00	202.00	207.00
Gwalior Rayon (10)	60.75	62.25	57.50	62.25
Khatau (100)	255.00	265.00	260.00	265.00
Kohinoor (100)	62.00	65.00	62.00	64.00
Morarjee (100)	255.00	260.00	240.00	245.00
National Rayon (100)	375.00	370.00	350.00	370.00
New Great Eastern (100)	90.00	90.00	89.00	90.00
Phoenix (100)	47.00	—	—	47.00*
Podar (10)	8.00	—	—	8.00*
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	71.00	—	—	71.00*
Standard (100)	569.00xd	580.00	542.00	552.00
Svadeshi (100)	173.00	173.00	170.00	172.00
Swan (100)	225.00	230.00	201.00	205.00
Tata Mills (25)	31.00	31.00	26.00	26.00
Electric				
Ahmedabad (100)	104.00	107.50	99.00	100.00
Andhra Valley (100)	153.00	151.00	148.00	148 00
B.Subarban (100)	122.50	—	—	122.50
Tata Hydro (100)	150.50	151.00	150.00	150.00
Tata Power (100)	150.00	152.00	149.00	150.00
Steel				
Mukand (10)	28.00	28.50	25.00	27.25
Tata Steel (100)	377.50	377.00	328.00	337.00
Engineering				
Larsen & Toubro (10)	63.50	63.50	55.50	61.50
Tata Eng. & Loco (100	645.00	648.00	570.00	623.00
S.L.M. Maneklal (100)	200.00	198.75	187.50	198.75
Voltas (100)	214.00	211.00	200.00	205.00
Walchandnagar (100)	200.00	215.00	200.00	215.00
Dyes & Chem				
Amar Dye-Chem (100)	158.00	155.00	150.00	150.00
Indian Dyestuff (100)	249.00	250.00	237.00	247.00
Polychem (50)	73.00	74.00	69.00	70.00
Tata Chemical (10)	69.00	70.00	63.00	67.50
Shipping				
Great Eastern (10)	53.75	59.00	47.50	56.75
Scindia (20)	27.00	30.75	26.75	29.00
Cement				
A.C.C. (100)	159.00	158.00	135.00	152.00
Shree Digvijay (100)	175.00	170.00	160.00	165.00
Sugar				
Maharashtra (50)	56.00	55.00	53.00	53.00
Phaltan (50)	44.00	44.00	43.00	44.00
Miscellaneous				
Bombay Burmah (25)	44.50	44.50	43.50	44.50
Hindustan Motors (10)	29.00	29.35	26.50	29.35
Premier Automobiles (100)	238.00	244.00	190.00	229.00
Pre. Construction (50)	78.00	82.00	78.00	78.00
Sirpur Paper (10)	33.25	34.25	31.50	33.50
Tata Oil (25)	87.00	86.00	78.00	83.00
W. Coast Paper (100)	112.50	112.75	107.50	110.00
Wimco (10)	14.50	15.50	11.00	15.00
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	349.00	350 00	290.00	330.00
Century Enka (100)	700.00	800.00	625.00	675.00
Garware Nylons (10)	37.25	37.00	35.00	36.00
Gold Mohur (100)	98.00*	—	—	98.00
Indian Rayon (100)	96.00	100.00	83.00	97.00
J. K. Cotton (10)	21.00	20.50	17.50	18.50
J. K. Synthetics (10)	54.00	53.50	49.00	53.00
Lakshmi Vishnu (100)	57.00	58.00	56.00	56.00
Mafatlal Fine (100)	242.50	242.50	232.50	237.50
Mafatlal Industries (125)	391.25	392.50	385.00	390.00
Modella Woollen (10)	10.00*	10.00	9.50	10.00
Modipon (10)	67.00	—	—	67.00*
Nirlon (10)	66.00	66·50	62.00	65 50

	Closing quotations 1-8-81	High	Low	Closing quotations 1-8-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	59.00	62.00	55.50	55.50
Reliance Textile (10)	107.50	106.50	100 00	103.25
S. I. Viscose (100)	270.00	270.00	240.00	257.50
Stretch Fibres (10)	9.50	9.25	9.25	9.25
Swadeshi Polytex (10)	16.00	16.00	15.25	15.50
Electric				
Amalgamated (10)	8.50*	8.00	7.50	7.50*
Surat (100) ...	99.00*	—	—	99.00
Cement				
Mysore Cement (10)	34.50	35.25	32.00	35.25
Saurashtra Cement (100)	115.00*	110.00	110.00	110.00
Paper				
Andhra Paper (100)	235.00	—	—	235.00*
Bhadrachalam (10)	18 00	18.00	17.50	17.50
Jayant Paper (100)	170.00*	—	—	170.00*
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	36.00	36.00	36.00	36.00
Ferro Alloys (100)	292.50	295.00	280.00	280.00
Hind Aluminium (10)	58.00	57.50	53.00	57.50
Khandelwal Ferro (100)	130.00	130.00	130.00	130.00
Mahindra Ugine (10)	58.00	57.00	54.00	56.00
Tata Yodogawa (100)	130.00	—	—	130.00*
Engineering				
Associated Bearings (100)	390.00	390.00	380.00	380.00
Bimetal Bearings (10) ...	43.00	43.00	39.00	42.00
Blue Star (10)	38.25	38.25	35.00	36.00
Elecon Engineering (100)	435.00	—	—	435.00*
Gujarat Steel Tube (100)	690.00	685.00	670.00	670.00
Hindustan Brown (100)	305.00	—	—	305.00*
Ingersoll-Rand (10) ...	103.50	106.00	95.00	103.00
Jyoti (100)	250.00	251.25	242.50	251.25
Kirloskar Cummins (100)	557.50	562.50	545.00	550.00
Kirloskar Oils (10) ...	33.00	32.50	29.50	31.00
Kirloskar Pneumatic (10)	57.00	57.00	55.00	56.00
Mahindra (10)	56.00	57.50	51.00	57.00
New Standard (100) ...	125.00	132.50	125.00	132.50
Sandvik Asia (100) ...	350.00	351.25	340.00	340.00
Vulcan-Laval (10) ...	34.50	35.00	33.50	34.50
Zenith Steel (10) ...	47.00	49.00	43.00	47.00
Cables & Elec.				
Asian Cables (100) ...	337.50*	—	—	337.50*
Bajaj Electricals (100) ...	182.50*	205.00	205.00	205.00
Crompton Greaves (100)	380 00	380.00	377.50	380.00
Otis Elevator (10) ...	50.00	52.00	48.00	52.00
Siemens India (10) ...	56.00	56.00	51.00	54.00
Chemicals				
BASF (10)	59.00	60.00	58.00	60.00
Bayer (India) (100) ...	257.50	262.50	250.00	260.00
Chem & Fibres (10) ...	22.50	22.00	21.00	21.00
Colour-Chem (100) ...	235.00	230.00	210.00	210.00
German Remedies (10)	25.50	25.50	25.00	25.50
Gujarat State Fert. (100)	418.00	432.00	405.00	426.00
Hindustan Lever (10) ...	44.50	43.50	42.00	43.00
Indian Organic (100) ...	320.00	315.00	295.00	315.00
National Organic (100)	225.00	225.00	205.00	220.00
Pfizer (10)	26.50	26.00	25.50	25.50
Polyolefins Ind. (100) ...	315.00	305.00	277.50	305.00
Sandoz (10)	27.00	27.25	25.00	27.00
Synthetics (100) ...	104.00	106.00	100.00	103.00
Warner-Hindustan (10)	24.50	24 50	24.50	24.50
Zuari Agro (10)... ...	27.00	27.50	25.00	27.50
Miscellaneous				
Bajaj Auto (100)	1,830.00	1,825.00	1,650.00	1,650.00
Bombay Oxygen (100)	120.00	120.00	117.50	117.50
Cadbury (10)	21.00	20.75	19.50	20.50
Camphor & Allied (100)	220.00	232.50	215.00	232.50
Ceat Tyres (100) ...	207.50	207.50	200.00	200.00
Colgate-Palmolive (10)	143.00	144.00	138.00	142.00
Empire Industries (15)	29.50	30.50	30.00	30.50
Fibre glass (10) ...	18 50	22.50	19.00	22.00
Gammon India (10) ...	23 25	23.00	20.00	22.50
Hindustan Ferodo (10)	40 00*	—	—	40.00*
Hoechst Dyes (10) ...	26 50	27 00	26.00	26.50
Indian Hotels (10) ...	93.00 xd	94 00	85.00	92.00
Motor Industries (100)	465.00	480.00	432.50	475.00
Tata-Finlay (10) ...	12.50	13.00	11.75	12.75

Notes : Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

Market Gossip

Madras Petro-Chem — management take over?

THE Industrial Development Bank of India (IDBI) is reported to have sounded the Kothari group of Madras for a take-over of the management of Madras Petro-Chem Ltd, a sick unit in Maharashtra, whose production facilities are located at Manali, Madras. The IDBI and other financial institutions and public sector banks have a considerable stake in the company because of the loans granted to this sick unit as well as the equity acquired through the conversion of loans. Kotharis are reportedly examining the proposal and are seeking clarifications. The company's financial position, its product-mix, the market for its products and other relevant aspects will be examined by the Kotharis before agreeing to manage this sick unit in Tamil Nadu

The company was originally incorporated as Nagpal Petro-Chem Refinery Private Ltd in 1967 in Maharashtra and was converted into a public limited company in 1969. In 1970 the name was changed to Nagpal Ambadi Petro-Chem Refining Ltd and again to Nagpal Petro-Chem Ltd in 1975. It was finally changed to the present name in 1980. The company has a technical collaboration agreement with Witco Chemical Corporation of USA. The summarised balance sheet of Madras Petro-Chem as at the end of August 1979 (See table) revealed a picture of bankruptcy in that loans and interest thereon aggregating Rs 10.87 crores far exceeded the fixed assets amounting to Rs 3.48 crores. Of these loans, Rs 3.85 crores were due to Industrial Credit and Investment Corporation of India Ltd (ICICI), Life Insurance Corporation of India (LIC), Tamil Nadu Industrial and Investment Corporation Ltd (TIIC) and IDBI and Rs 6.95 crores to Bank of India, Indian Bank and Central Bank of India. The balance of Rs 7 lakhs consisted of interest on short-term loans remaining unpaid. Between April 1979 and March 1980, loans amounting to Rs 40 lakhs had been converted into equity by exercising the convertibility clause by the financial institutions (IDBI — Rs 12 lakhs, LIC — Rs 17 lakhs and ICICI — Rs 11 lakhs).

Madras Petro-Chem Ltd—Balance sheet as on August 31, 1979

(Rs crores)

	Liabilities	
1.	Share capital	2.62
2.	Reserves and surplus	0.78
3.	Loans	10.87
4.	Current liabilities and provisions	0.71
	Total (1 to 4 or 5 to 8) ..	14.98
5.	Fixed assets	3.48
6.	Current assets, loans and advances	6.24*
7.	Miscellaneous expenditure	0.17
8.	Debit balance as shown in profit and loss account	5.09

* Includes a sum of Rs 3.21 crores due from the former distributors of the company.

At present it appears that what is contemplated is not a merger of the company with any Kothari group company but only a change in its management. A merger would enable a healthy corporate unit to get tax concessions in respect of over Rs 5 crores carried forward as accumulated losses by Madras Petro-Chem. It is to be seen whether Kotharis would be interested in pursuing such a prospect. As the Kotharis have established themselves in various industries such as tea, coffee, textiles, fertilisers, chemicals, electronics and textile machinery, they should not be averse to stepping into the petro-chemicals field through a management takeover of Madras Petro-Chem. Moreover, Kothari (Madras) Ltd, a Kothari group company, had announced in March 1981 plans to diversify into petro-chemicals field with projects costing about Rs 40 crores. The caustic soda unit of Kothari (Madras) is also located at Manali, Madras.

More sugar, higher price

SUGAR production has shown a rising trend in the current sugar season (October to September) with output amounting to 50.56 lakh tonnes till July 15 as against 38.13 lakh tonnes in the corresponding period of 1979-80. Against this total offtake from sugar factories till July 15 was about 36.85 lakh tonnes for internal consumption and 0.60 lakh tonnes for exports (making total offtake of 37.45 lakh tonnes) as against 42.54 lakh tonnes and 2.30 lakh tonnes (total 44.84 lakh tonnes) in the same period of the 1979-80 sugar season.

The rising output should have reflected in easier availability of the commodity in the market at reasonable prices. However, the price which had come down to as low as Rs 5.70 per kg in retail has gone up to Rs 6.70 per kg in a matter of three weeks and indications are that they will continue to go up as festive season in the State has begun. The rise is attributed to upcountry demand and sugar is being sent outside Maharashtra at the cost of local consumers. Moreover, there are uncertainties about the exact date when supplies of imported sugar should start landing — official estimates of dates of arrivals being given as August 10 and 15 and September 20. The Government expects to receive one lakh tonnes in August and a similar tonnage next month. With such a huge quantity being in the pipeline, consuming circles are surprised that the Government has announced a lower free sale quota of 1.7 lakh tonnes for August. They believe that traders are making full use of the lower release and reduced offtake from factories to jack up the price. Even co-operative sugar factories, they fear, will quote higher prices for future deliveries since they would compensate themselves for big donations made to a well publicised foundation scheme of the Maharashtra Government.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*August 3, 1981*	*A week ago*
Groundnut	(*Rajkot*)	542	538
Rapeseed	(*Kanpur*)	540	53
Sesamum	(*Delhi*)	625	62
Castorseed	(*Kanpur*)	290	28
Linseed	(*Kanpur*)	580	51
Sugar	(*Bombay*) (*a*)	666	62
Cotton	(*Bombay*) (*b*)	4,400	4,40
Jute	(*Calcutta*) (*c*)	240	24
Aluminium	(*Bombay*) (*d*)	1,505	1,51
Copper	(*Bombay*) (*e*)	3,550	3,47
Lead	(*Calcutta*) (*f*)	1,225	1,17
Zinc	(*Calcutta*) (*g*)	1,610	1,60
Gold	(*Bombay*) (*h*)	1,665	1,67
Silver	(*Bombay*) (*i*)	2,540	2.2
Caustic soda	(*Bombay*) (*j*)	625	62
Soda ash	(*Bombay*) (*k*)	242	2

* In terms of 10 gm for gold, kg. for silv and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Botto (d) Scrap, (e) Wire coil, (f) Scrap, (g) Har spelter, (h) Standard, (i) .996. (j) Flakes a (k) Tata.

COMMODITIES

Subdued trading in cotton

Bombay, August 3

Subdued trading conditions prevailed in the spot cotton market during the past week with limited business passing. The sentiment was influenced by continued satisfactory progress of the monsoon and expectations of Pakistan Cotton imports to the extent of one lakh bales.

Although the Pakistani delegation led by Mr A. A. Qazi, General Manager of the Cotton Export Corporation of Pakistan, did reach Bombay and had prolonged discussions with the representatives of the Cotton Corporation of India and the Indian Cotton Mills' Federation, nothing materialised until the end of the week under review.

The major points that had to be thrashed out included the price difference between the rate at which Pakistan was willing to sell her cotton and the rate at which Indian buyers were willing to buy, whether any provision should be made for the fluctuating exchange rates especially in the light of steady improvement of the dollar, and the freight that had to be incurred by the buyers if bulk of the cotton could not be off-loaded in Bombay on account of the port congestion.

The following has been the trend some of the leading cotton varieties :

(Rs. per candy)

	July 31	July 24
Digvijay	5,050-5,100	5,050-5,100
Kalyan	4,750-4,850	4,800-4,900
Saurashtra CO2	4,850-5,100	4,900-5,100
Shankar 4	5,900-6,200	5,900-6,200
Maharashtra H 4	5,400-5,550	5,400-5,550
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,400	5,300-5,450
MP Y1	4,900-5,000	4,950-5,000
MP 1007	5,150-5,250	5,200-5,300
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100

While the talks were going on about the possible import of Pakistan cotton, the Cotton Corporation of India went ahead with its scheme of promoting cotton exports. It may be recalled here that the entire question of cotton imports had become an issue only as a result of the CCI blindly encouraging exports without taking into account the actual statistical position of cotton and ensuring that there would be a confidence-generating carry-over stock during the lean months before the arrival of new crop Indian cotton.

Ironically enough, even before the Pakistan cotton deal for import of one lakh bales could be clinched, the Government of India announced its decision to allow initially exports of 55,000 bales of long and extra-long staple cotton. The argument conveniently put forward was that the foreign exchange that might be earned by export of this cotton could come in handy when the imported Pakistan cotton has to be paid for.

HINDUSTAN FERODO LIMITED

NOTICE

It is hereby notified for the information of the public that Hindustan Ferodo Limited propoess to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for the production, supply, distribution or control of the undernoted new articles :

Article		**Installed Capacity/Estimated annual production**
Reprographic Toners	:	2.000 Tonnes
Etchants	:	200 Kilo litres

Other particulars of the proposed new undertaking are as under :

(i) Name of the proposed undertaking	:	HINDUSTAN FERODO LIMITED (Same as existing)
(ii) Name(s) of person(s) or authority/authorities proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking.	:	L. B. Shastri Marg, Ghatkopar, Bombay 400 086. It is managed by the Managing Director, subject to the superintendence, control and direction of the Board of Directors. The new undertaking will be owned and operated by Hindustan Ferodo Limited and will be managed by the Board of Directors of that Company.

(iii) Capital structure of the applicant person or authority and of the proposed undertaking :

			Rs.
Authorised	:	40,00,000 Equity Shares of Rs. 10 each	4,00,00,000
Subscribed and paid up	:	24,81,703 Equity Shares of Rs. 10 each	2,48,17,030
Forfeited shares	:	2.470 Shares at Rs. 5 each being the amount originally paid up	12,350
		Total ..	2,48,29,380

(iv) Proposed location of the new undertaking	:	The undertaking is proposed to be located in an under developed area in the State of Maharashtra. The location will be finalised in consultation with the Government of Maharashtra.
(v) Brief outline of the cost of Project, the scheme and source of finance	:	The estimated investment in Fixed Assets of Rs. 63 56 lakhs is proposed to be financed by a share issue to the Indian Residents only, loans from financial and State Investment Corporation, Central Investment subsidy and Company's internal accruals.

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this Notice intimating his views on the proposal and indicating the nature of his interest therein.

For HINDUSTAN FERODO LIMITED

N. VENKATARAMAN
Managing Director

Registered Office :
L. B. Shastri Marg, Ghatkopar,
Bombay 400 086.
Dated : 11th August, 1981.

DEPARTMENT OF ATOMIC ENERGY
Directorate of Purchase and Stores

On behalf of the President of India, the Director, Directorate of Purchase and Stores, Department of Atomic Energy, Bombay-400 001 invites tenders as detailed below :—

1. DPS : TAPS : FAB : 41 due on 21.8.81
Fabrication and supply of Cation Tank T-17 for Regeneration Facility as per purchaser's tender document. Qty. 1 No.

2. DPS : BARC : CAP : 4047 due on 4.9.81
Universal Ultra Precision Rotary Table, face plate dia. 300 mm, through hole dia. 50 mm as per purchaser's specification. 1 No.

3. DPS : RAPS : O & M : MIA : 123 due on 4.9.81
Pressure gauge in various sizes of dial from 37 mm to 800 mm in various ranges for air, water, oil etc. Qty. 371 Nos.

4. DPS : NAPP : PPF : 56 due on 4.9.81
Supply of welded carbon steel pipes as per purchaser's tender specification. Qty. 100 mtrs.

5. DPS : BARC : EEQ : 5069 due on 4.9.81
Portable manual arc welding silicon diode rectifier welding set suitable for Argon Arc S.S. and aluminium metal welding complete with accessories as per purchaser's specifications for Bhabha Atomic Research Centre.

6. DPS : NAPP : PPED : PPF : 330 due on 5.9.81
Supply of stainless steel strainers as per purchaser's tender specifications. Qty. 201 Nos.

7. DPS : BARC : PDS : FAB : 5 due on 7.9.81
Precision machining, fabrication and assembly of components of HSM-3 as per purchaser's tender document. Qty. 12 sets.

8. DPS : NFC : FUR : 100 due on 7.9.81
Laboratory work tables in different sizes as per our drawings and tender specifications. 21 Nos.

9. DPS : NAPP : PPF : 55 due on 7.9.81
Supply of ERW carbon steel pipes in different sizes as per purchaser's tender specification. Qty. 2520 mtrs.

10. DPS : NAPP : EB : MIA : 46 due on 8.9.81
Supply of solid state cyclic timer relay for D 20 vapour recovery dryer control each having 3 relays of different specifications. Qty. 12 Nos.

11. DPS : RRC : IEE : 976 due on 8.9.81
A radiographic enhancement system to carry out certain functions on radiographic images of welds and thin objects including image scanner film recorder, display etc. as per purchaser's specification. 1 No.

12. DPS : RRC : IEE : 975 due on 8.9.81
(1) Residual gas analyser suitable for identifying and measuring partial pressures of components in residual gas as well as for leak detection operating in quadropole mass spectrometer principle. 1 complete system.
(2) Residual gas analysis system with gauge head and control unit having resolution of better than 50% valley over the whole mass range as per purchaser's specifications. 1 No.

13. DPS : BARC : MIA : 15272 due on 9.9.81
High efficiency particulate air absolute filter, casing capacity of 1700 M^3/hr in mild steel medium micro glass fibre collection efficiency 99.99%.

14. DPS : BARC : IEE : 3649 due on 9.9.81
X-Y recorder as per purchaser's specifications. 1 No.

15. DPS : BARC : IEE : 3650 due on 9.9.81
Polarographic analyser system with differential pulse cyclic voltametric, anodic/cathodic stripping modes as per purchaser's specification. 1 No.

Tender documents priced Rs. 10 each for items 5, 8, 10 and 14; Rs. 15 for item 3; Rs. 25 each for items 1, 4, 6, 7, 9, 11, 12 and 15; Rs. 35 each for items 2 and 13 and General conditions of contracts priced 50 P. to all items except items 1 and 7 can be had from the *Finance and Accounts Officer, Department of Atomic Energy, Directorate of Purchase and Stores, 3rd Floor, Mohatta Building, Palton Road, Bombay-400 001*, between 10 a.m. to 1 p.m. on all working days except on Saturdays. Import Licence will be provided only if the items are not available indigenously to all items except items 1, 3, 5, 7, 8, 10 and 13. Tenders will be received upto 3 p.m. on the due date shown above and will be opened at 4 p.m. on the same day. The right is reserved to accept or reject lowest or any tenders in part or full without assigning any reasons.

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Rising trend in yarn

Bombay, August 3

A rising trend was noticed in the local yarn market during past week. The prices of 150D NRC, 120D NRC, 150D CR, 120D CR, and 150 D acetate increased by 42 paise to Rs 52.31, 84 paise to Rs 55.07, Rs 2.20 to Rs 52.86, 28 paise to Rs 54.80 and Rs 1.65 to Rs 44.05 respectively. However, the price of 100D SIV remained unchanged at Rs 55.07.

Groundnut oil hits new peak

Bombay, August 3

Groundnut oil prices touched a new peak at Rs 159 per 10 kg on August 1. The marked thrust upwards was attributed to the recent hike in imported oils duty, imposition of margins on millers, wholesalers and retailers by the Gujarat Government and inadequate release by the State Trading Corporation. In the earlier week the closing price was Rs 152.36. This indicated an increase of Rs 6.64 per 10 kg in just a week.

In view of the firmness in groundnut oil, imported oils also spurted. Besides, the supply position of imported oils was also nominal. Palmoleine hardened by Rs 5.54 to Rs 147.50, soyabean by Rs 5.60 to Rs 146.50 and RBD by Rs 9.36 to Rs 122.12 per 10 kg.

Groundnut improved considerably on encouraging advices from producing centres and the likelihood of another rise in groundnut oil prices during the impending festival seasons. Groundnut Karad bold, Saurashtra bold and Saurashtra quality rose by Rs 8 each to Rs 637, Rs 642 and Rs 646 per 100 kg.

Castorseed and its oils also rallied smartly. Sellers were reserved on account of poor arrivals at the producing centres and firm advices from upcountry centres. Besides, castor oils attracted miller support. Madras small and Kanpur bold advanced by Rs 10 each to Rs 332 and Rs 324 per 100 kg. Castor oil commercial gained Rs 2.50 at Rs 71 and BSS oil Rs 3.25 at Rs 76.25 per 10 kg.

Linseed and its oil also came in for good support in view of the poor stocks. Linseed bold moved up sharply by Rs 20 to Rs 520 per 100 kg and its oil by Rs 6.24 to Rs 135.20 per 10 kg.

Among cakes, groundnut expeller was up by Rs 50 at Rs 2,100 and de-oil by Rs 25 at Rs 1,600 per tonne. Castor was steady at Rs 775 while cottonseed eased by Rs 25 to Rs 1,575 per tonne.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :

	1-8-1981	25-7-1981
G. nut		
Karad bold	637.00	629.00
G. nut oil	159.00	152.36
Cast. Md. Sm.	332.00	322.00
Cast. oil com.	71.00	68.50
Cast. oil BSS	76.25	73.50
Linseed bold	520.00	500.00
Linseed oil	135.20	128.96

Grains subdued

Bombay, August 3

A subdued tendency prevailed in foodgrains in the local market during the past week.

In cereals, wheat superior variety ruled in the range of Rs 275-330 per quintal, thus showing no change over the week. Demand was slack. Supplies were limited. Sellers were reserved. The Saurashtra variety hardened by Rs 3 at Rs 215-235 per quintal.

Activity in rice was moderate, arrivals were limited. The undertone was steady. Sellers were reserved. The basmati variety was traded at Rs 450-600 per quintal and Surti kolam at Rs 340-400 per quintal.

In coarse grains, maize declined by Rs 25 to Rs 130-135 per quintal. The inflow of other coarse grains was slack. Owing to lack of buying support jowar and bajra maintained last week's levels of Rs 190-225 per quintal and Rs 185-230 per quintal respectively.

Among pulses gram declined by Rs 9 to Rs 410-427 per quintal on account of moderate inflow and poor demand. The inflow of kabli gram continued. Buyers were lifting forward delivery goods. Masoor dal was quoted at Rs 515-520 per quintal.

Sugar advances

Bombay, August 3

Sugar prices in the local market displayed firmness during the past week on brisk demand from local dealers and bulk consumers. The price of C-30 grade sugar gained Rs 30 per quintal to Rs 649-657 per quintal. The inflow was restricted. Arrivals were easily absorbed. The undertone was firm. Sellers were reserved. The weekend stock was placed at 4,965 bags. The price of sugar C-30 as on August 1, 1981 was lower by Rs 133 per quintal than on the corresponding date a year ago.

Gold quiet, silver up

Bombay, August 3

An almost quiet tendency in gold and an erratic tendency in silver marked trading in the Bombay bullion market in the past week.

Standard mint gold opened at Rs 1,672 per 10 gms and closed at Rs 1,670 per 10 gms. Silver (.999 fineness) opened at Rs 2,505 per kg and after having ups and downs closed at Rs 2,560 per kg.

Money : Conditions easy

Bombay, August 3

Money conditions in the 3ombay short-term money narket remained easy during he past week. In the interank call section, both notified nd commercial funds opened t six per cent and receded to hree per cent on Tuesday July 28) and came to the reek's low of 2½ per cent on 'riday (July 31). The rates ardened to eight per cent on aturday. However, the maret closed at seven per cent.

ank credit, aggregate eposits expand

Bombay, August 3

Bank credit of the scheduled mmercial banks expanded by s 44.75 crores to Rs 26,777.73 ores during the week ended ly 24, 1981. Aggregate desits increased by Rs 35.84 ores to Rs 40,578.45 crores. lances of the banks with the eserve Bank of India (RBI) reased by Rs 142.38 crores Rs 4,523.07 crores and their rrowings from the RBI by 10.16 crores to Rs 556.13 res.

Notice

IE BOMBAY DYEING MANUFACTURING CO. LTD.

NOTICE

'he 102nd Annual ieral Meeting of the mbers of The Bombay eing & Manufacturing Ltd., will be held at Birla Matushri Sabha- 19, Marine Lines, ibay 400 020 on Thurs- , the 3rd September. l at 3.45 p.m. to tran- the following busi- :

To adopt the Direc- Report and the audited Balance Sheet and Profit and Loss Account for the year ended 31st March 1981.

2. To sanction the declaration of a Dividend.

3. To appoint a Director in place of Mr Pratapsinh Mathuradas who retires by rotation and is eligible for re-appointment.

4. To appoint a Director in place of Mr J. D. Choksi who retires by rotation and is eligible for re-appointment.

5. To appoint a Director in place of Mr J. N. Guzder who retires by rotation and is eligible for re-appointment.

6. To appoint a Director in place of Mr S. R. Vakil who retires by rotation and is eligible for re-appointment.

7. To appoint Auditors to hold office from the conclusion of this Meeting until the conclusion of the next Annual General Meeting, and to fix their remuneration, and if thought fit, to pass the following Resolution as a Special Resolution :—

> "RESOLVED that, Messrs. A. F. Ferguson & Co., Chartered Accountants, be and are hereby appointed Auditors of the Company to hold office from the conclusion of this Meeting until the conclusion of the next Annual General Meeting, on a remuneration of Rs 85,000 plus re-imbursement of actual out-of-pocket expenses."

SPECIAL BUSINESS :

8. To consider and, if thought fit, to pass (with or without amendments as may be permissible), the following Resolution as Ordinary Resolution :

ORDINARY RESOLUTION :

"RESOLVED that, in accordance with the provisions of Section 293(1) (a) of the Companies Act, 1956, and subject to the approval of the Controller of Capital Issues, Financial Institutions and such other approvals as may be necessary and subject to such conditions and modifications as may be prescribed in granting such approvals, and which may be agreed to by the Board of Directors of the Company, the consent of the Company be and is hereby accorded to the Board of Directors being authorised to create a floating charge by hypothecating the Company's current assets, present and future, in favour of its Depositors (present and future) in respect of the Fixed Deposits received from the Public and employees of the Company, the loans from the Shareholders and any other unsecured deposits or loans or borrowings of any kind which have been accepted and which are outstanding at present and which may be accepted in the future."

"RESOLVED FURTHER that, the floating charge to be so created in favour of Depositors mentioned above shall rank subsequent to—

(i) all present and future hypothecations of stocks, stores, work-in-process and book debts in favour of the Company's Bankers for working capital facilities and quasi credit facilities like letters of credit, guarantees, co-acceptance of usance bills covering purchase of indigenous machinery etc already sanctioned or to be sanctioned to the Company in future.

(ii) the mortgages and/or charges already created or to be created in respect of immovable properties and of fixed assets in or attached thereto, present and future, and the hypothecation of all tangible and movable properties and assets present and future.

By Order of the Board of Directors,

For THE BOMBAY
DYEING & MFG. CO.
LTD.
J. D. NANAVUTTY
Secretary

Registered Office :
Neville House,
J. N. Heredia Marg,
Ballard Estate,
Bombay, 22*nd July*, 1981.

Notes :

(a) A MEMBER ENTITLED to ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND A PROXY NEED NOT BE A MEMBER.

(b) The Share Transfer Books and the Register of Members of the Company will remain closed from Wednesday, the 19th August, 1981 to Thursday, the 27th August, 1981 both days inclusive.

(c) The Dividend when declared will be made payable on or after Monday, the 14th September, 1981 to those Members, whose names stand on the Register of the Company on Thursday, the 27th August, 1981.

(d) Declaration in Form '14-B' under Income-tax Rules, 1962, read with Section 194 of the Income-tax Act, 1961, to be effective must reach the Company on or before Wednesday, the 19th August, 1981.

(e) The Members are requested to notify immediately any change of address to the Company.

(f) The relative Explanatory Statement pursuant to Section 173 of the Companies Act, 1956, is annexed to the Notice of the Annual General Meeting posted to the Members.

Beyond headlines

Manpower for small industry

By SIDDHARTHA GANGULI

THE industrial system of our populous sub-continent has been forced to go the labour-intensive way. Political reasons apart, labour orientation has been the largest common factor in forming the base of our industrial, labour and other policies at the Centre and state levels as a step to reduce the magnitude of unemployment and its associated socio-economic problems. Total or even partial automation is thus considered justified and acceptable only when either the economy of scale demands it or the technology is such that it is deemed essential for techno-economic advancement and its application becomes impossible without automation.

This, in reality, however, leads to a paradoxical situation since most medium and large scale operations require, for achieving viability, a sustained stress on the technological rather than the labour component. Such operations naturally become highly technology intensive thereby requiring a disproportionately high capital-to-labour ratio and a large capital investment which restricts their application to reasonably big public sector companies, joint sector undertakings, and private business houses and multinational corporations. Although the human component carries a much lesser weightage, it is compensated by the fact that the technology-intensive nature of such medium and large industries makes employment of skilled manpower one of its basic functional prerequisites.

The technical skill, in such situations, naturally has to be of a very high order. The engineering institutions, polytechnics, and industrial training institutes (ITI's) — sponsored and run mostly by the government and, in some cases, by private bodies and trusts too, cater to the needs of training the youth for development of such skills. The Government of India also runs two parallel apprenticeship training schemes — technical and commercial. for the youth who are generally placed in medium and large scale organisations with the idea of receiving on-the-job exposure. Many of these organisations have their own training schools and in-house facilities too for developing skilled techno-commercial manpower captively.

Nevertheless, all these training facilities taken together can serve an extremely limited portion of the nation's large unemployed youth segment. The less fortunate ones who, in spite of their keenness, cannot get the opportunity to be exposed to such training and development programmes (which are a preparatory step towards a vocational career), continue to remain unoccupied and fall prey to undesirable company and several of them succumb to the allurement of clandestine occupations. Many thus turn out to be 'anti-social' elements thus adding to our social problems.

So, on the one hand we have the growing population of unutilised untrained youth who suffer the danger of turning anti-social due to lack of proper direction and opportunity, on the other we have the nation's fast-expanding small scale sector starving of suitable manpower for running its technical and commercial operations. While the bulk of the systematically trained and developed skilled manpower gets absorbed in medium and large organisations, the leftouts are either too highly skilled for or reluctant to join a small business or industry. Besides, the small scale sector can hardly afford to pay the price at which such personnel normally sell in the open market. It, therefore, is left to make do with the untrained or half-trained substandard youth force. Very few of the skilled people can be motivated to leave the comfort, shelter, and other attractions of the organised medium or large sector and take up even senior positions in the small scale—not even to face the laudable challenge of developing a small business into a medium and then, possibly, into a large one.

The small scale industries are basically labour-intensive by nature. Certain items, which do not require a very advanced or complex technology and which can be effectively produced by and large through manual operations, thus normally feature in the small scale sector. The Government has also taken steps to reserve certain items exclusively for the small scale to prevent unhealthy competition from medium or large organisations, which, by virtue of their technological strength, can easily have an edge ove the small manufacturer by producin goods on a mass scale, thus leading t cost reduction and better economy.

While the small scale does not require to utilise highly skilled personnel it certainly has to employ people wit some basic knowledge and skill to mak its operations feasible and viable. Sinc most of the small scale organisations i our country still operate at an unorganised level, very few of the unemploye youth even get to know about the oppo tunities that may be available or forthcoming in such organisations. The co factor also stands in the way of the sma scale's advertising the vacancies an openings. The small scale's recruitment thus normally done from amongst know people and circles purely on the basis word-of-mouth circulation of inform tion. It eventually ends up with unsu able personnel, relatives, and acquai tances who cannot be asked to lea easily. These are some of the burni problems from which our vital sma scale sector has been suffering.

The problem is a little too compl to be solved overnight. It can. howev be eased through the means of a step-t step or phased handling. The first st would obviously be to bridge the cons cuous gap that exists today between t demand of a special type of manpov in the small scale sector and the supp of such manpower. This will, in its tu reduce the nation's growing unempl ment problem to some extent.

The type of people that a typi small industry or business would requ need not to have even the level of edu tion up to school-leaving. It is suffici for them to be educated up to Class or VIII. This school education ought be followed by a 2 or 3 years and, some cases, even one year of training basic trades. Although there is at pres an emphasis on work education in school curricula, there is plenty of sc for supplementing governmental eff through non-governmental organisatio The government and non-governme funding agencies should, therefore, courage setting up of such projects facilities on a wide scale throughout country. In this context, the small in tries associations can play a very role in mobilising resources and crea a network of infrastructure for hu resource development.

Dr Ganguli is managing director of Prex Miniclocks Pvt Ltd and management adviser to leading companies.

COMMERCE

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EDITOR : VADILAL DAGLI
ASSOCIATE EDITORS : D. B. MAHATME
SUBHASH CHANDRA SARKER

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COMMERCE RESEARCH BUREAU

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All enquiries may be addressed to :

The Director
Commerce Research Bureau
N.K.M. International House
178 Backbay Reclamation
Bombay-400 020
Phone : 241423

PEOPLE

Mr P. S. Deshpande, who has been appointed executive director of Bank of Maharashtra on August 13, 1981, has been associated with the bank for 26 years. With a brilliant academic record behind him, Mr Deshpande was till recently general manager of the bank and has specialised in foreign exchange affairs. He is also taking active interest in the conduct of occupational guidance seminars.

Deshpande

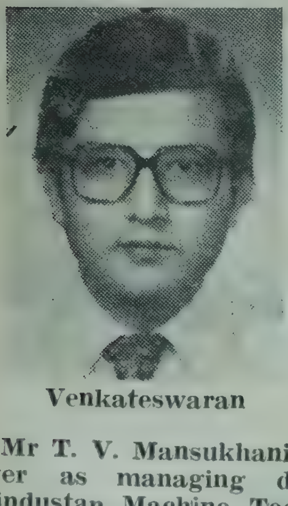
Dr Nanabhoy S. Davar, principal of Davar's College of Commerce, has been elected president of the Bombay Productivity Council.

Mr Surendra V. Dempo, vice-chairman of Dempo Steamships Ltd, has been appointed honorary consul for Portugal in Bombay. Mr Dempo will have consular jurisdiction over the State of Maharashtra and Union Territories of Goa, Daman and Diu, Dadra and Nagar Haveli.

Dempo

Mr Chandrakant R. Trivedi has been appointed executive director of Dena Bank with effect from August 13, 1981. Till recently general manager of the bank, Mr Trivedi joined Dena Bank in 1953 and has since then acquired deep knowledge of the banking industry. He has travelled widely abroad to acquaint himself with modern trends in international banking and is also associated with several rural banks.

Trivedi


Venkateswaran

Mr S. N. Bakshi has been appointed executive director (operations) of Miles India Ltd.

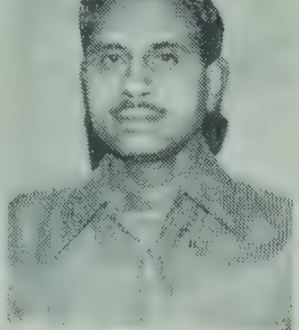
Mr A. V. Ramana Rao, president and managing director of Bharat Metallic Powders Ltd, has been elected president of the Institute of Cost and Works Accountants of India for 1981-82.

Mr Ambi Venkateswaran, who was assistant vice president of Bank of America, has been promoted as vice-president.

Mr T. V. Mansukhani has taken over as managing director of Hindustan Machine Tools Ltd.

Mr H. Mukherjee has joined as managing director of State Bank of Indore.

Mr P. S. Ramohan Rao, the additional inspector general of police in Government of Andhra Pradesh, has taken over as vice-chairman and general manager of AP State Road Transport Corporation.


Rao

THE WEEK

The Union Government announced stricter guidelines for bonus issues by companies on Tuesday whereby companies wanting to make bonus issue will have to produce a no objection certificate from public financial institutions from whom they have taken loans or funds. The gap between any two bonus issues will now be 36 months instead of the present 24 months and the value of bonus shares to be issued must not exceed the total paid-up equity capital of the company. Expectedly the stock markets reacted bearishly to the news. ★

Twenty state governments have announced new loans totalling Rs 457.25 crores and bearing interest at 7 per cent per annum. Subscriptions to the loans will be received from September 1 and the loans will be redeemed after 12 years. ★

Hindustan Paper Corporation has announced a Rs 300 per tonne cut in prices of imported paper bringing them down to Rs 8,200 with effect from August 17. ★

The estimated outgo of foreign exchange as a result of wheat import from the USA will be about $ 293 million, Rao Birendra Singh, Union Agriculture Minister, told the Lok Sabha. ★

About 215,000 tonnes of sugar are being imported from Brazil, USA, South Korea, Philippines and EEC countries at a total value of Rs 100 crores and the commodity is at present being loaded on the ships in these countries, according to the Union Agriculture Minister. ★

The Union Government has decided to set up a 300,000 tonnes per year capacity phosphatic fertiliser project at Paradeep in Orissa with a total investment of Rs 183.64 crores including foreign exchange component of Rs 26.08 crores. The project will be executed by a new public sector company. ★

The Government has decided to waive the import duty on cotton being imported from Pakistan through Cotton Corporation of India. Pakistan has agreed to supply one lakh bales of medium and short staple cotton at fixed prices. Indian mills have reportedly so far booked 50,000 bales of the Pakistan cotton. ★

The Kerkar committee on slums and dilapidated houses, appointed by the Government of Maharashtra, has submitted a 126-page report to Chief Minister, Mr A. R. Antulay. ★

Wholesale price index

At 285.7 the latest available wholesale price index for the week ended July 25, 1981 showed a rise of 0.2 per cent over the preceding week and 9.8 per cent over the year.

Money stringent

The Bombay short-term money market witnessed stringent conditions as on Monday (August 10, 1981). Both notified and commercial funds were renewed at ten per cent and nine per cent. Fresh money was transacted at nine per cent.

COMMERCE

Search for new sources of energy

THE UN conference on new and renewable sources of energy at Nairobi was built up by the secretary-general of the conference, Mr Enrique Iglesias, as a momentous step as it was the first concerted global effort to plan a rational energy future for the world. The first week's deliberations of the conference, however, do not hold out such high hopes for the outcome of the conference, and newspaper reports have suggested hat, all the rich and poor nations have agreed to, is he need to end world dependence on oil and develop n array of alternative energy sources. The expected esponse from the developed countries to the current nergy crisis which faces the world and which will get ccentuated when the oil reserves run out has not been hat generous. True, Canada has pledged more than $1 illion over the next five years to energy development but, he richest country of the world, the United States of merica has promised no more than a doubling of the ilateral aid to more than $70 million in the next fiscal ear. It was immediately noted that the US contribu-ion would fall even short of the commitments by other estern nations to rectify the energy imbalance of rich nd poor nations. What is more the US has indicated hat it wants the private industry to play the major role n developing new energy sources on the plea that the rippling dependence on imported hydro-carbons must ot be replaced by a equally debilitating collection of ubsidised and uneconomic new and renewable energy rojects. The US is investing millions of dollars for the arnessing of solar energy in particular as well as deve-oping other new sources of energy but it does not want o share the fruits of its research and development reely even when warnings have been sounded that in e next two or three decades mankind will face an un-recedented challenge in meeting its energy require-ents. Obviously if the developing world has to share e benefits of their research, it will only be at a price hich the US private sector will dictate.

In her keynote address the Prime Minister Mrs ndira Gandhi, had called for a world policy on energy nd had underscored the need for an energy revolution. s she explained, the developed and developing coun-ies were in the same predicament, for better or worse d the challenge had to be accepted on a global basis. owards that objective, she proposed the creation of international consortium dedicated to mobilising bila-ral credit and aid from institutions and which would low for compact planning and monitoring of world ergy programme. It is uncertain whether the Nairobi ference will move in that direction particularly when e US has been lukewarm to such aid or sharing of benefits of research. The 'Nairobi Plan of Action' that is expected to emerge from the deliberations of the conference would perhaps contain nothing more than pious hopes unless during the second week of the deliberations (the conference concludes on August 21) awareness emerges that what the world is faced with is a common problem, not limited to the developing countries or developed countries.

In the immediate period ahead, however, the problem is of sharing of fossil fuels, particularly oil. It is conceded that technologies for harnessing of solar energy are to be refined and made cheaper if the common man has to benefit from them. Even in the case of bio-gas plants, as our experience shows even after setting up 80,000 of them, technical and sociological problems have to be solved if we are to set up community size plants. Organisational problems like collection of dung and community financing of the plants have to be studied. At the Nairobi conference, China announced ambitious plans to fuel millions of rural homes with bio-gas from living plants and animals, and we should profit by its experience. Whatever be the plans, there is no question of immediately switching over to these new sources of energy, and Mrs Gandhi and the Kenyan President, Mr Daniel arap Moi, did well to point out that this put into sharp focus the question of sharing of oil. As Mrs Gandhi emphasised the industrialised world must acknowledge its responsibility towards the developing world for which the problems must not be made more unbearable than they are at present. The Kenyan President came forward with the idea of dual pricing of oil to help the developing countries but this is not likely to be accepted by the Organisation of Petroleum Exporting Countries (OPEC), particularly when it has consistently opposed the suggestion in the past. It is doubtful if even the rich nations of the world would favour such a move. For them high prices of oil do not matter since they have been able to recover the higher price paid for oil through their exports of manufactured goods and arms to OPEC countries, of course, in the process making the plight of the non-oil developing countries much more difficult than what it would have been.

The Nairobi conference, serving as it will do as a vast clearing house of information, is more likely to bring home to the developing countries that they must first have national energy policies of their own. It is regrettable that even India, which is taking a leading part in the Nairobi conference, has no clearly defined energy policy even when expert committees and groups have drawn pointed attention of the Government to this lacuna. We have set up a Commission for Additional Sources of Energy without making sure that the existing sources are used judiciously. The Working Group on Energy Policy in its report submitted two years ago had called for curbs on oil consumption, conservation of energy through greater efficiency in utilisation and increased reliance on renewable sources of energy. We have made no progress in either of the directions. Even while laying emphasis on new and renewable sources the Sixth Plan provides not more than Rs 40 crores for this purpose, in addition Rs 10 crores for a project relating to magneto-hydro-dynamic power generation and other new technologies based on coal. It may be that this amount is almost ten times of what was spent in the earlier five years but the planning shows a lack of urgency. We should have time-bound programmes considering that the running out of oil reserves is only two or three decades away, and such a time-bound programme should have no constraints imposed on it by lack of resources. It is most painful that even where fuelwood on which the villagers depend for their energy is concerned, there is no ambitious programme drawn. The Sixth Plan has promised to spend Rs 50 crores on fuel and farm forestry. But there is no reference to building up the organisation that will be needed to implement a really ambitious fuel and farm forestry programme. The army, the village panchayats and voluntary organisations must all be mobilised for such a programme if the villagers are not to be starved of their fuelwood. At Nairobi, India, jointly with Kenya, has sponsored a resolution calling for acceleration of programmes of afforestation with a view to enhancing the availability of fuelwood and the plan seeks to achieve five-old increase in annual tree planting rate by the year 2000 AD. *Kubabul* promises to be a solution. At a recent seminar Mr B. B. Vohra, chairman, National Committee on Environmental Planning, had estimated that if the 48 million hectares of denuded forests forests and pastures and 40 million hectares of culturable wastes and fallows could be planted with *Kubabul*, an additional income of Rs 66,000 crores per annum could be generated. At least this would solve the fuelwood crisis that villages face if not the problem of poverty and unemployment.

Quarter century of engineering exports

THE growth in engineering exports is the logical corollary of the industrial diversification and growth that has taken place in the country in the wake of independence. The industrial development during the pre-Independence days was severely restricted by the negative attitude of the government of the day which frowned upon every initiative to secure industrial expansion and diversification. Under conditions of such stunted growth of industries, exports were naturally confined to primary produce like jute and tea and to some manufactured items like textiles, which the country could produce. It was not until planned development was under way that the diversification of exports through the inclusion of engineering goods could be achieved. At the beginning of the Second Five Year Plan, in 1956-57, the engineering exports totalled Rs 50 crores. Twentyfour years later, during 1980-81, the value of engineering exports rose up to an estimated Rs 900 crores or by 18 times. Over the same period the value of total exports of the country showed a rise of a little over ten times from Rs 604 crores during 1956-57 to an estimated Rs 6,500 crores during 1980-81. The engineering exports have thus shown a welcome dynamism to grow at a faster pace than exports in general.

No doubt the policies and actions of the government have played a vital role in this growth in engineering exports. The government has not only promoted the growth and diversification of industries but has also provided incentive for the growth in engineering exports. It set up the engineering export promotion council with the specific objective of boosting up the export of the products of engineering industries of the country.

The council helps Indian exporters through exploring the overseas markets and identifying items having export potential and providing market intelligence through market surveys or otherwise and promotes contact between Indian exporters and foreign buyers. Th council also helps the Indian exporters to move throug the growing complexities of international trade, advising them in procedures of GSP utilisation, and buyin practices of overseas countries, and arranging supply o indigenous and imported raw materials for expor promotion. The rise in the membership of the counci from 36 at the time of its establishment in 1956 to mor than 7000 in 1981 shows the rising strength of the engineering industries as also of the organised effort to promote the sale of engineering goods abroad.

There has been a welcome diversification in th components of engineering exports. While initially ligh engineering consumer goods only were being exporte now capital goods constitute a significant proportion (3 per cent) of these exports. India can export industria plant and machinery and projects in the field of civi engineering, textile, sugar, paper and paper industries electric power generation, transmission and distributio steel structurals, wagons and coaches, complete vehicles machine tools, coastal vessels and ships. Along wit the countries of South-east Asia, West Asia and Afric Indian engineering goods are now being purchased b the developed countries in Western Europe and Nort America, Japan, Australia and Newzealand. India firms are now in a position to provide consultancy, su ply know-how and technical and management service Indian firms are also setting up joint ventures in foreig countries. By the end of the eighties engineering e ports are expected to rise tenfold from Rs 900 crores i 1980-81 to Rs 9,000 crores in 1990-91.

While considering India's exports it is perhaps n out of place to note here that India's share in the world trade declined from 2.91 per cent in 1938 to 0.42 per cent in 1979. Further the decennial growth rate of India's total export trade was above the world level between 1938 and 1948 but has declined in the following decades. In other words the diversification of exports has not enabled India to retain her position in world trade, not to talk of improving it. This is undoubtedly disappointing. Particularly so, as it is recalled that the effective public cost of export promotion has been going up from year to year. The estimated public cost of export promotion (budgetary expenditure on trade and export promotion, fiscal support in the form of duty drawback, and cost of subsidised export credit) went up from Rs 110 crores during 1971-72 to Rs 626 crores during 1978-79. There has been a rising trend in the share of incentive-based exports in the total export trade of the country. If, nevertheless, India is not able to make its mark on the world trade front it requires some consideration. One reason perhaps lies in the fact that nearly one-half of the foreign technical collaboration agreements involve restrictive clauses on exports and the sectors of Indian industry that depend on foreign technological collaboration contribute a very small, almost insignificant part of India's export earnings. Moreover, there is not the desired readiness on the part of many exporters to work in a straightforward manner and there have been several reports of assistance for export promotion having been incorrectly or improperly appropriated by them.

Why not a metal bank ?

THE metal-based industries in India have now learnt to live with the shortages of basic non-ferrous metals. They have also accepted the fact that the country has inadequate ore resources, except in the case of aluminium, and thus they would have to depend on supply of imported metals through whatever source it comes. With prices of non-ferrous metals fluctuating widely both in India and abroad, and with supplies becoming uncertain, it is no surprise that the metal-based units are not in a position to plan their working efficietly. The need for having adequate stocks of metals with a view to ensuring their availability to consumers at reasonable prices, therefore, assumes importance. Against this background the Bombay Metal Exchange (BME) president, Mr S. N. Parikh's plea for creating a "metal bank" has not come a day too soon.

The need for creating buffer stocks of metals has been stressed on various occasions in the past, and it has been the pet topic of the presidents of BME and the Indian Non-ferrous Metals Manufacturers' Association (INFMMA), in their speeches at the annual meetings of these organisations. It may be mentioned that towards the end of 1978 the Union Government itself was contemplating creating a stockpile of metals to avert shortages, but nothing further was heard about the scheme. The idea would seem to have been dropped for all purposes, as the Union Commerce Minister, Mr Pranab Kumar Mukherjee, addressing the annual meeting of the INFMMA in September last year had turned down the plea for buffer stock of metals because one of the main problems with non-ferrous metals was wide fluctuations in international prices.

However, the Government could have certainly made a beginning when prices abroad were ruling low about two years ago and when the Government was in a position to spare enough foreign exchange for the purpose. For reasons known to it, the Government does not appear to have moved in that direction, even when the Committee on Controls and Subsidies had recommended building up buffer stocks of 20,000 tonnes of aluminium, 30,000 tonnes of copper and 25,000 tonnes of zinc. Only in the case of aluminium the Government chose to wake up rather late in the day when the shortage became acute in 1979-80 following drastic power cuts experienced by aluminium smelters and the Government was obliged to go in for huge imports at heavy costs.

While the present situation in aluminium points to plenty of supplies mainly as a result of poor off-take by electricity boards following paucity of funds, the position in regard to other metals continues to be far from happy. The gap between indigenous production and demand is widening. According to the Sixth Five Year Plan 1980-85, the gap is expected to widen from 61,200 tonnes, 62,300 tonnes and 32,600 tonnes, respectively, in 1979-80 in the case of copper, zinc and lead to as much as 70,000 tonnes, 65,000 tonnes and 35,000 tonnes by 1984-85. This gap will continue to widen beyond 1984-85 as the country's capacity of producing these metals continues to be limited by poor metal content of ores exploited and the chronic power shortage experienced by power-intensive smelters. According to the Planning Commission's estimates made early this year, the country will need to import 125,000 tonnes of copper, 50,000 tonnes of lead, 90,000 tonnes of zinc and 250,000 tonnes of aluminium by 1993. With shortfalls of such magnitudes staring in the face, it is time the Government should make a beginning at least now towards the goal of building up buffer stocks of metals. No doubt maintaining an inventory of costly metals would involve some expenses but these could be passed on to the consumers who should not grudge bearing them if they wish to have their requirements of metals regularly in a phased manner. Japan has been successfully operating buffer stock schemes for metals for years and there is no reason why India cannot do so.

LETTER FROM BRUSSELS

MALCOLM SUBHAN

MFA or imports at minimum prices?

THE MFA negotiations have got off to a slow start. The mid-July meeting of the Gatt Textiles Committee, which is the MFA negotiating forum, was especially disappointing for the roughly 25 developing exporting countries. They had come to Geneva prepared to negotiate, only to find that the EEC had no firm proposals to put before the Committee while the US had agreed, at the Community's request, to withhold its own detailed proposals.

It is unlikely the EEC will be ready to table its proposals at the five-day negotiating session scheduled for September 21. Although the Community Council of Ministers will be meeting here on September 15, it is not expected to adopt the more detailed negotiating mandate which the European Commission needs if it is to begin effectively to negotiate.

The fact is that the 10 member governments are divided. The Germans, Dutch and Danes believe the time has come for the EEC to return to the principles of free trade and liberalise textile imports. The Germans in fact have tended increasingly to disregard the import quotas set by the Community, much to the anger of their Common Market partners.

But three Community heavy weights—the UK, France and Italy—are pressing for more stringent controls on imports, especially from the low-cost countries. The Italians are not especially afraid of competition; their costs are the lowest in Western Europe for a wide range of knitwear. However, their Common Market partners tend to complain if they must absorb large amounts of imports from both the Far East *and* Italy.

The British Government is in something of a dilemma. It would like to remain faithful to its free trade principles but, faced with rising unemployment in Britain, it is pressing for tighter controls under the MFA (and also against Japanese cars for example). It is less vocal than in 1977, however, partly in order to avoid retaliation by developing countries (as happened last year when the Indonesians cancelled a number of contracts).

The most forthright in their demands for tighter controls are the French, whose textile industry has been hit by one factory closure after another. In the last few weeks the French Government has had to deal with the consequences of the collapse of the country's biggest textile group, Boussac-Saint Freres.

The company, which employs over 30,000 workers, is based in Lille, the town whose mayor was Pierre Mauroy, until he was appointed Prime Minister by President Mitterand. The French President, unlike President Reagan and Mrs Thatcher, is determined that the fight against unemployment shall have priority.

To this end he has opted for measures likely to give the quickest results, whatever their long-term implications. If the rising unemployment in the textile and clothing industries is due to cheap imports—and the country's powerful textile lobby is certain of this—then imports must be curbed.

Not surprisingly, the EEC's chief textile negotiator, Horst Krenzler, opened his formal statement to the Textiles Committee on July 14 with a reference to the situation in the Community's textile industry. He noted that the situation had not improved since 1977 and had even deteriorated in certain cases. He claimed that job losses had accelerated since 1980, and had been accompanied by a growing number of company closures.

EEC claims of a crisis in the textile industry have been rejected by the developing countries, however. And certainly the Community's own statistics do not bear out Mr Krenzler's statement to the Textile Committee.

Using 1975 as the reference year (1975 = 100) the production index for the EEC textile industry stood at 109 in 1979 and 106.5 in 1980. The corresponding indices for the clothing industry were 104.4 and 99—and for manufacturing industry as a whole 118 and 117. Production in the textile industry clearly has been rising, if at a slower rate than in manufacturing as a whole.

But the situation varies from country to country. The Italian textile and clothing industries in fact have even outperformed the manufacturing sector as a whole. The French textile industry has managed reasonably well, while its British counterpart has seen its output fall by some 20 per cent in relation to 1975. Production in the British clothing industry was rising, however, until last year, when the index fell to 95. (No figures are given for the French clothing industry.)

The Community's own statistics make it clear that there is no real crisis in the European textile and clothing industries. The job losses must be attributed to higher productivity—*i.e.* a steady restructuring of the industry. While registered unemployment has risen sharply in the last 18 months (and is still rising) it has involved the economy as a whole. Forcing the textile industry to keep on workers it does not need will only result in lower productivity—and reduced competitivity.

Even the British government recognises this. However, the textile lobbies, helped by the media, have succeeded in conveying the impression of an industry which has been undermined by cheap imports to the point where it will disappear in a cloud of dust (from falling factories) unless these imports are severely curtailed.

But some sectors of the industry are beginning to realise that the EEC may not be able to impose its wishes on the exporting countries as in 1977. As a result, alternative strategies are being canvassed, one of which envisages the scrapping of the MFA and its replacement by a system of minimum prices, to be operated by the Common Market countries themselves.

The idea—and it is no more than that at present—is French in origin and has received some support from clothing manufacturers in that country. It has no official backing, however, even in France. Textile federations in the EEC have had a look at the idea but for the present they remain committed to the MFA, suitably revised to accommodate their views, of course.

The idea cannot fail to appeal to them, however, as it offers a solution of breath-taking simplicity to the problem of low-cost imports. This is to subject all imports to a threshold, or minimum, price, and to refuse an import licence for products offered at lower prices.

Imports from the US would also be subject to minimum prices. The Americans could hardly object, it is pointed out, having led the way with their system of "trigger" prices for steel imports into the US.

Continued on page 351

SPECIAL ARTICLE

New technologies for rural development

By **ARVIND N. MAFATLAL**

THERE is no doubt that our primary concern is to manage our business and industry effectively to generate profits some of which could be utilised by the Government for planned development of the country. As long as 80 per cent of our people do not have the necessary purchasing power to utilise the products of our industry, we must realise there is a limit to the extent to which we ourselves can expand our business and industry. Therefore, it is also a matter of enlightened self-interest that we give urgent attention to helping the large section of our people who presently do not have the required income to go in for the products of industry.

Besides, rural development needs management input which we have developed in our industries and business. If this management input is effectively introduced into our rural development schemes, I am convinced it is possible to achieve more satisfying results and quickly too. Above all these is the modern concept of management which compels us to operate our industry and business within the enlarged framework of national and social objectives. Rural development has become an integral part of our business and industry. It is in this sense I feel that the FICCI has done a good job in organising this workshop to focus the attention of industry and businessmen and generally the urban sector on the imperative needs of rural areas.

No doubt, such workshops may have to be organised in Bombay or other cities in the country to ensure the presence of the urban elite and the workshop will serve to motivate them for dedication to the cause of rural development. But in all sincerity I would like to express here that it is extremely difficult, sitting and deliberating in urban centres like this, to perceive, let alone understand, what is urgently needed in rural areas, why people are poor and even getting poorer. It is only when we live amidst them, even for a day or two, that our genuine feelings of the heart get stirred and help to motivate us to work for the cause of the rural people.

In workshops like this we often deliberate, discuss and emphasise doing more of what is already being done — schools, hospitals, roads, drinking water wells, irrigation facilities, increase of fertiliser application, improved varieties of seeds etc. On the other hand, in such workshops, it is not possible for us to get an idea of the real impact of thirty years of development on our villages. Our rural people, particularly the rural poor, are still continuing to survive and struggle in a feudal and exploitative society and lead sub-human existence without satisfying even the barest minimum needs of food, clothing and shelter. Our priorities for the rural poor, I may emphasise here, have become distorted since we are looking at the villages as outsiders without understanding the conditions and minds of rural people. It is with this in mind, I am making the suggestion that such workshops be organised in rural areas particularly where new technologies are being developed for the benefit of the rural poor, and where significant development is taking place with the introduction of such technologies.

What are the priorities?

In my opinion, over 70 per cent of our population living in rural areas are the largest manpower resources. Over 48 per cent of these people, as per the estimates by the Planning Commission, are living below the poverty line. The programmes introduced so far, the technologies developed have benefited only a small section of these people. The majority of the people are still poor and their condition is growing worse. Unless we are clear about how these people can be helped to come up above the poverty level, we shall not be able to define the nature of training required for workers in rural areas. Let me first, therefore, mention briefly what is of urgent requirement in our country for the benefit of the rural poor and then suggest a few ways in which training of manpower can be improved upon and better organised.

The basic problem of rural poverty has been a situation of seasonal employment during busy season and lack of employment opportunities during lean period, compelling the weak groups to migrate or starve.

A well-planned strategy of rural development programme, which will enable the weaker sections of rural population to earn during the lean period, will provide a sound basis for sustained economic growth and rural prosperity. This plan has three facets of integrated rural development in the form of planned support. The immediate task is relief from hunger and disease and ignorance. The next phase is rehabilitation involving helping the rural people to develop productive assets. This is a joint enterprise of the Government, voluntary organisations and business community with the rural people as operating partners. It is only after the productive assets are developed, the rural poor become viable and their projects become economically feasible to go in for bank loans and other source of finance from outside. Thus, three phases in the development of rural people are to be clearly recognised — Relief, Rehabilitation and Development.

Mr Vadilal Dagli is on leave. His column *Editor's Notebook* will be resumed on his return from leave.

Simultaneously, with the recognition of these three phases of development, we should also recognise the three major inputs for helping the rural people to reach the stage of development. These are — modern technology (not western technology alone), motivation and management. Identification and training of manpower for the rural areas becomes more sharply focused around these two efforts of three phases for development and three inputs for development.

This is the text of the keynote address delivered by Mr Arvind N. Mafatlal, at the workshop on "Manpower for Rural Development — Its Mobilisation and Training", organised by Federation of Indian Chambers of Commerce and Industry in Bombay on August 13, 1981.

We have, during our over ten years of experience with our work in rural areas, been able to identify and understand these processes more clearly. Bharatiya Agro-Industries Foundation, with its foundation farm at Uruli Kanchan, has been developing some technologies which are relevant to the conditions in which the rural poor live. These conditions are poor soil, lack of water, uneconomic cow, and traditional crops with low yield potential under the uncertain and irregular rainfall. A crossbred cow produced from a local nondescript cow; fodder which can come up even with limited quantities of water; fruit, fibre and fuel plants cultivation instead of regular field crops; harvesting of whatever little quantity of water which the rain brings to the fields and conserving it in farm ponds — these are some of the components of the modern technology which are indigenous and not western. This technology is labour-intensive, less capital intensive, less management intensive, but suited to the present capabilities of farmer, and also capable of being developed with the farmers' involvement and with the help of training facilities which could be organised for their benefit from outside.

These technologies, when fully implemented, can generate a net income of about Rs 4,500 to Rs 5,000 per year per family on one acre of land. Messrs National Organic Chemical Industries Ltd, has recently developed a technology, viz NFI (Nocil Film Technique), which promises even larger incomes in smaller area and with very little quantity of water. It has been possible for us to concentrate and develop these technologies because of our commitment to the rural poor and to help them earn an income which will take them above the poverty level.

For want of time I am not able, on this occasion, to furnish you with more details of the projects which we have introduced in Gujarat, Maharashtra, Madhya Pradesh, Uttar Pradesh and Orissa. I would, therefore, like to make humble suggestion that the next workshop may be organised in Chitrakoot where you will be able to see for yourself the technologies developed and introduced, the way motivation of rural people is being attempted through the three-tier medical and health care delivery system, and the management input supplied by Mafatlal Industries Ltd. You will also see the way in which our two companies, viz, National Organic Chemical Industries Ltd and Polyolefins Industries Ltd are reorienting their R & D work and relating themselves to be of relevance to the needs of the poorest people. I am quite sure, you will all benefit by visiting Chitrakoot for a day or two.

Training centres

I hope, you will now appreciate my earlier statement that unless the technologies and methods of work for immediate benefit to the rural poor are developed and introduced, training of rural workers will not have much meaning. No doubt, Government has introduced a number of training programmes since the starting of community development projects in 1952. More recently, we have seen the introduction and operation of TRYSEM (Training of Rural Youth for Self Employment). The Central Government has also been the source of inspiration for starting a number of polytechnics in rural areas. The Indian Council of Agricultural Research has been instrumental in starting *Krishi Vigyan Kendras* all over the country. A number of secondary schools and colleges are now operating in the rural areas. Besides these, there are a number of gram sevaks training centres, gram sevikas training centres, farmers' training centres etc. We should stop and look at the impact of these institutions in enriching the rural life. It is the common knowledge that most of the young persons coming through these institutions, particularly the colleges, schools, polytechnics etc, enter into the job market in urban centres, because their educational pattern has not been able to expose them to the immense potentialities in the rural areas and the relevant technologies which could be utilised by them for their own production and profitable employment in rural areas.

Even the formal and non-formal training programmes for the rural people have been mostly emphasising the traditional scientific methods. These are of course of benefit to the people who have larger holdings and who are already above the poverty line. All these institutions require a new orientation. They should be primarily redeveloped to meet the needs of the people in the local areas. Rural polytechnics can be instrumental in developing the tools and skills which would benefit the rural masses. They can start production wings either directly as an integral part of their institution or as a separate institution and which can supply the requirements of that particular area. I understand that the Union Ministry of education has promoted community polytechnics in recent years. This is an encouraging development. If these polytechnics relate their production programme to the improvement of life in the rural area around, it can be the beginning of a new phase of integration of the Polytechnics with the community. The training programme and the educational pattern will automatically get reoriented to the needs of rural areas.

Energy

Recently there has been a great deal of emphasis of energy plantation. This is rightly so in view of the increasing shortage of power, and the need to mobilise the renewable sources of energy. We have a variety — Hawaiian Giant — which is a wonder plant. It can grow in any type of soil with minimum quantity of water. One can harvest at the end of three to four years and earn an income which is twice or thrice that of income through regular field crops. Agro forestry, utilising plants like Hawaiian Giant, can be taken up in most of our waste lands, hill slopes and degraded forest lands. Village schools can also play an important role in developing these plantations and earn a sizable income both to the school and to the students. Similarly, unemployed rural youth can take this up as an enterprise and earn sizable income to lead a satisfying life. Training in this technology can contribute effectively to develop the economic resources of rural areas.

I would like to mention one more matter in this connection. There has been a tendency for migration of rural people and rural talents to urban areas. This applied to workers also. This cannot be reversed merely by directions. Unless rural areas provide challenging and satisfying opportunities, nobody will be attracted, much less motivated, to stay back and work. I am now convinced that there are people who are dedicated and sincere enough to go and stay and work in the villages. These people need opportunities. Opportunities can be created when relevant technologies and progammes are undertaken in villages, management input introduced. It is for this reason, I have been always saying that there should be co-ordination among the institutions developing rural technologies, voluntary organisations providing motivational force and business and industry providing the management input.

COVER STORY

Reviving sick industries: At what cost?

By **COMMERCE RESEARCH BUREAU**

THE phenomenon of industrial sickness appears to have become increasingly common in the last few years. Industrial units both in the large and the small-scale sectors are reported to have been gripped by the sickness. While such sickness in industry may arise on account of various reasons, the common effects of such sickness are hardship and unemployment for labour engaged in the industrial units and waste of national resources. It should, therefore, be considered essential not only to devise suitable means for dealing effectively with sick industrial units but also to set up suitable arrangements for monitoring and detecting industrial sickness at an early stage.

Normally, the management of industrial undertakings should be considered primarily responsible for sound and honest management of the undertaking and for prevention of sickness. However, when the management is either unwilling or unable to perform its role, the Government and the financial institutions have to intervene to fulfill their larger social responsibility of protecting employment and ensuring efficient use of national resources.

The data availability position regarding industrial sickness is itself far from healthy. It is unfortunate that the Union Government and the Union Industry Ministry appear to have abjured their responsibility of collecting detailed statistics on sickness in Indian industry. No doubt, the Reserve Bank of India (RBI) does collect some data on the subject, but that it does from a limited point of view—that of monetary involvement of banks in these units. These data do not indicate the actual or the likely loss of employment and output arising out of the sickness of the industrial units.

Dimensions of sickness

In 1976, the RBI defined a sick unit as one which incurred a cash loss for one year and, in the judgement of its bankers, was likely to incur such losses in the next two years and consequently had a worsening debt-equity ratio.

According to the RBI's *Report on Currency and Finance* 1979-80, there were 325 large and medium scale industrial units at the end of June 1978, each of which had availed of bank credit of rupees one crore and above and which had been classified by the RBI as sick. The amount of bank credit locked up in and outstanding against them at the end of June 1978 was Rs 956 crores. By the end of June 1979, the number of such sick industrial units had gone up to 345 and the amount of bank credit outstanding against these units had increased to Rs 1,102 crores. According to the information given in Rajya Sabha, by the end of December 1979, the number of such sick units and the amount of credit outstanding against them had gone up further to 378 and Rs 1,158 crores respectively (Table 1).

In addition to the sick large and medium scale units, the number of sick small scale units had gone up from 16,805 at the end of June 1979 to 20,975 at the end of December 1979 and the outstanding bank credit had increased from Rs 181 crores at the end of June 1979 to Rs 262 crores at the end of December 1979.

Thus, taking both the large and medium scale sector and the small scale sector together, it can be seen that the total number of sick industrial units in the economy rose from 17,150 at the end of June 1979 to 21,353 at the end of December 1979. The total amount of bank credit outstanding against sick units rose from Rs 1,283 crores at the end of June 1979 to Rs 1,420 crores at the end of December 1979.

Table I : Number of sick industrial units and credit outstanding : Industry wise position

(Amount in Rs crores)

Industry	As at the end of								
	June 1978			June 1979			December 1979		
	No. of Units	Credit outstanding		No. of Units	Credit outstanding		No. of Units	Credit outstanding	
		Amount	Per cent		Amount	Per cent		Amount	Per cent
I. Large and medium scale									
(i) Engineering (including iron and steel) ..	112	286.18	29.9	115	337.25	30.6	130	393.82	34.0
(ii) Cotton textiles ..	78	263.65	27.6	84	287.71	26.1	88	308.86	26.7
(iii) Chemicals	21	117.95	12.3	23	135.04	12.3	22	128.31	11.1
(iv) Sugar	31	79.48	8.3	35	100.95	9.2	46	79.62	6.9
(v) Jute textiles	31	76.58	8.0	33	89.75	8.1	33	85.85	7.4
(vi) Rubber	5	25.17	2.6	7	34.07	3.1	—	—	—
(vii) Cement	4	13.69	1.4	4	13.21	1.2	—	—	—
(viii) Others	43	93.38	9.9	44	103.74	9.4	59	162.02	13.9
Total (I)	325	956.08	100.0	345	1,101.72	100.0	378	1,158.48	100.0
II Small scale	—	—	—	16,805	181.71	—	20,975	262.00	—
Total (I+II)	—	—	—	17,150	1,283.43	—	21,353	1,420.48	—

SOURCES : (i) Reserve Bank of India, **Report on Currency and Finance 1979-80**
(ii) Reply to Rajya Sabha Unstarred Question No. 807 on February 24 1981
(iii) Reply to Rajya Sabha Unstarred Question No. 1040 on February 26, 1981

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The industrywise break-up of sick large and medium scale units shows that units belonging to five industry groups—engineering, cotton textiles, chemicals, sugar and jute textiles— account for the major share of bank credit locked up in such sick units. Of the total credit locked up in sick large and medium units, those belonging to these five industry groups accounted for 86.1 per cent at the end of June 1978, 86.3 per cent at the end of June 1979 and 86.1 per cent at the end of December 1979. Even within these five industry groups, units belonging to engineering and cotton textile groups accounted for more than 50 per cent of the total credit amount outstanding against all sick large and medium scale industrial units as on these three dates.

The statewise break-up of sick large and medium scale units shows that six states—West Bengal, Maharashtra, Tamil Nadu, Gujarat, Uttar Pradesh and Karnataka—account for the major share of bank credit outstanding against such units. As at the end of June 1978, June 1979 and December 1979, these six states accounted for more than 80 per cent of the credit outstanding against such sick units. And even within these six states, the three states of West Bengal, Maharashtra and Tamil Nadu accounted for more than 60 per cent of outstanding credit as on these three dates (Table 2).

The statewise distribution of sick small scale sector units shows that at the end of December 1979, West Bengal had the highest number of such units followed by Maharashtra, Andhra Pradesh, Uttar Pradesh, Karnataka and Assam in that order (Table 3). Tamil Nadu, Gujarat, Bihar and Orissa also had sizable number of sick small scale units at the end of December 1979.

Given these dimensions of industrial sickness, what have been the causes that led to this situation? Several committees at the levels of the Centre, states, financial institutions and industrial associations have time and again diagnosed the causes of industrial sickness. In general, these causes include: incompetent and dishonest management, financial indiscipline, old and worn out machines, technical obsolescence, demand constraints, labour relation problems and shortages of inputs.

The policy measures evolved to cure industrial sickness could be put at different levels—at the levels of the Union Government, the Reserve Bank of India, the Industrial Development Bank of India and the Industrial Reconstruction Corporation of India.

Policy measures of the Union Government

With a view of reviving sick industrial units, the Union Government evolved in 1977 a scheme of merger of sick units with healthy ones. In the Finance Act, 1977, the Union Government introduced certain fiscal concessions under Section 72-A of the Income Tax Act whereby a healthy unit taking over a sick company was allowed to carry forward and set off the accumulated losses and unabsorbed depreciation of the latter against its own tax incidence. However, it was stipulated that company mergers eligible for the concession should be in the 'public interest'. In respect of amalgamations mooted by MRTP companies, the requirement was an 'overwhelming public interest'.

Three conditions pertaining to 'overwhelming public interest' were:

1. The amalgamated company should have experience of manufacturing the same products which were produced by the sick unit proposed to be taken over by it.

2. The sick company considered for merger with a healthy unit should belong to an industry suffering from widespread and chronic sickness.

3. There must be a 'demonstrable' gain to public interest through the proposed merger.

It was further required that (1) the sick company taken over should have employed staff numbering more than 100 and (2) it should have assets of more than Rs 50 lakhs. These two conditions were applicable to both MRTP and non-MRTP companies.

In view of the tardy progress of company take-overs under the scheme, the Union Government decided in September 1980 to withdraw all these conditions.

The liberalisation led to more expeditious clearance of merger proposals, considering that while between 1978 and September 1980, only 16 schemes had been approved, between September, 1980 and June 1981 the number of approvals was 25.

Until August, 1979, the Govern-

Table 2: Number of sick industrial units and credit outstanding : Statewise position

(Amount in Rs crores)

State	As at the end of								
	June 1978			June 1979			December 1979		
	No. of units	Credit outstanding		No. of units	Credit outstanding		No. of units	Credit outstanding	
		Amount	Per cent		Amount	Per cent		Amount	Per cent
I. Large and medium scale									
West Bengal	78	229.62	24.0	84	267.13	24.2	93	301.38	26·0
Maharashtra	68	227.61	23.8	71	253.44	23.0	74	273.41	23.6
Tamil Nadu	36	154.66	16.2	36	155.36	14.1	32	143.26	12.4
Gujarat	38	80.51	8.4	35	88.08	8.0	37	93.57	8.1
Uttar Pradesh	33	77.37	8.1	36	95.51	8.7	49	92.01	7.9
Karnataka	13	48.69	5.1	14	62.95	5.7	17	62.78	5.4
Others	59	137.62	14.4	69	179.25	16.3	76	192.07	16.6
Total (I)	325	956.08	100.0	345	1,101.72	100.0	378	1,158.48	100.0
II. Small scale	—	—	—	16,805	181.71	—	20,975	262.00	—
Total (I+II)..	—	—	—	17,150	1,283.43	—	21,353	1,420.48	—

SOURCES: As per Table I

ment did not allow amalgamations of inter-connected companies or subsidiaries with their principal units. It took the view that such mergers went against the basic objectives of the policy relaxation under section 72-A.

But in August, 1979, in a bid to make the scheme more attractive, it decided to throw open the tax concession also to companies merging with their subsidiaries or inter-connected units.

The policy on sick industries recognised that the revival of a sick unit cannot be the responsibility of any single agency and that it can be achieved effectively only by a sharing of the responsibility by Central Government, state governments, financial institutions, banks and the management itself. The policy stated that closer and more vigilant involvement of financial institutions in units with management of doubtful competence or integrity would be essential. For this purpose the policy statement announced that a group of professional directors would be set up jointly by financial institutions. This group was expected to report to the financial institutions on measures that should be taken to prevent industrial sickness.

In the case of industrial units which were already sick the policy advocated rehabilitation through joint efforts of state governments and financial institutions who were to provide financial and managerial support with suitable restructuring of the management. It also announced that proposals for the merger of sick units with healthy ones would be examined by special authority under the Income Tax Act of 1961. It was only when these courses of action failed that steps under the Industries (Development and Regulation) Act would be considered.

In order to examine all the alternative courses of action and to decide on the most suitable measures the policy statement proposed to set up a screening committee under the chairmanship of Secretary, Industrial Development with representatives of the finance ministry, Reserve Bank of India and financial institutions.

A major decision that the 1978 policy statement announced was not to return to the same management a sick undertaking the management of which had been taken over under Industries (Development and Regulation) Act.

New strategy

A new strategy for sick units was evolved by the Union Industry Ministry in the last week of June 1981. This three-pronged strategy aims at preventing sickness in industry, quick rehabilitation of units that go red and an early decision on the future of such units. A three-member cabinet committee, consisting of the Union Finance Minister, the Union Commerce Minister and the Union Minister of State for Industry, was asked to scrutinise this strategy. Nothing has been heard of it since then.

A major plank of this new strategy is the provision that units employing over 1,000 persons or having an investment of Rs 9 crores or more in fixed assets should be nationalised, if the Reserve Bank of India, the financial institutions or the state governments are unable to contain the growing sickness in the sick unit.

This would, however, be subject to three further considerations. A sick unit would be nationalised provided that (a) the line of production is critical to the economy; (b) the unit has been functioning as mother unit with large ancillary linkages; and (c) its closure would cause substantial dislocation and throw out of employment such a large number of persons that it would not be possible to provide alternative jobs to them.

The Union Industry Ministry also cautioned that it would not be desirable to nationalise a unit which is inherently non-viable. The new strategy has therefore emphasised the need for the concerned administrative ministry to satisfy itself regarding the viability of the unit before a decision is taken to nationalise it. An examination of these broad features of the new strategy aimed at curing the industrial sickness reveals that it completely leaves out small scale sector units from its scope. even though the incidence of sickness among these units is by no means insignificant.

Role of Reserve Bank

The RBI has created a Sick Industrial Undertaking Cell in its Department of Banking Operations and Development (DBOD). This cell has been closely monitoring banks' performance in identifying sick units and taking remedial measures. In 1979, it undertook studies of the organisational set up in banks for monitoring sick units. Besides, to ensure that rehabilitation programmes of sick units are prepared and implemented properly, the cell has been convening meetings of various financial institutions and borrowers. The cell also looks into the progress made by the sick units.

At the end of June 1979, the banks had completed viability studies in respect of 182 units out of the 345 industrial units identified as sick. It was found that 155 units with outstanding bank credit of Rs 604.54 crores were viable.

The Reserve Bank has also recently constituted a committee under the chairmanship of Mr T. Tiwari (chairman, Industrial Reconstruction Corporation of India) to examine the legal and other difficulties faced by banks and financial institutions in the rehabilitation of sick industrial undertakings and to suggest remedial measures including changes in law.

To the complaint that banks as well as the RBI have been allegedly lukewarm in reviving sick units, the Reserve Bank of India reply seems to be. "If rehabilitation programme had to be taken up mainly on socio-economic considerations, it was necessary that equitable sacrifice was made by each bank/financial institution as also by the

Table 3 Statewise number of sick small scale units
(As at the end of December 1979)

State/Union Territory	No. of Sick Small Scale Units
West Bengal	6,948
Maharashtra	2,763
Tamil Nadu	955
Uttar Pradesh	1,152
Gujarat	856
Karnataka	1,039
Andhra Pradesh	1,323
Bihar	802
Rajasthan	323
Madhya Pradesh	525
Kerala	653
Haryana	225
Orissa	772
Punjab	403
Assam	1,045
Delhi	530
Pondicherry	3
Goa	75
Himachal Pradesh	51
Jammu & Kashmir	71
Manipur	186
Nagaland	3
Meghalaya	25
Tripura	70
Chandigarh	43
Total	20,841

SOURCE: Reply to Part (a) of Rajya Sabha Unstarred Question No. 1492 on 5th March 1981.

owners of the units, other creditors, government, labour etc." (*Report on Currency and Finance* 1979-80). It is doubtful whether a committee of the Reserve Bank's own choice will come out with anything contrary to its known views.

Soft loan scheme

The soft loan scheme was introduced in November 1976 for financing the modernisation programmes of five selected industries, namely cotton textiles, jute, cement, sugar and specified engineering industries. The main objective of the scheme was to enable industrial units in these five groups to overcome the backlog in modernisation, replacement and renovation of plant and machinery, so as to achieve higher and more economic levels of production and thereby improve their competitiveness in the domestic and international markets. The scheme aimed at fuller utilisation of installed capacities with minimum capital cost, did not contemplate either the wholesale replacement of existing assets or providing assistance to units which were sick or closed down. The role of the scheme as regards the sickness was preventive rather than curative.

The scheme was operated by the IDBI with participation of IFCI and ICICI. The overall responsibility for operating the scheme was vested in IDBI. IFCI was the lead institution for jute and sugar industries, ICICI for engineering industries and IDBI for cotton textiles and cement industries.

As compared to normal term loan assistance from financial institutions, loans under the soft loan scheme were extended on concessional terms, not only in regard to the rate of interest but also in regard to other provisions such as the promoter's contribution, debt-equity ratio, initial moratorium and repayment period. In pursuance of the decision taken by the Union Government in November 1977, loans under this scheme were exempted from the convertibility stipulation.

Under the soft loan scheme, 369 applications were received by the end of June 1980 (after adjusting for proposals rejected, withdrawn or closed), with an amount of Rs 826 crores. Out of them, 341 applications with an amount of Rs 551 crores had been sanctioned by that date. Only Rs 190 crores had however been actually disbursed, pertaining to 194 applications At the end of June 1980, 28 applications were pending for an amount of Rs 65 crores.

Of the total number of applications for soft loan received till the end of June 1980, textile industry had the highest number of applications at 226, followed by engineering industry at 86, sugar at 23, jute at 20 and cement at 14. In terms of amount of soft loan applied for, textiles industry had the highest share (Rs 483 crores) followed by engineering (Rs 153 crores), cement (Rs 79 crores), jute (Rs 61 crores) and sugar (Rs 50 crores) (Table 4).

The actual disbursement under the soft loan scheme amounted to Rs 189.9 crores as at the end of June 1980. Of this, textile industry received the highest amount of Rs 89.9 crores followed by cement industry (Rs 39.1 crores), engineering industry (Rs 36.1 crores), sugar industry (Rs 20.9 crores) and jute industry (Rs 3.9 crores).

The units under the soft loan scheme were being classified as 'weak' 'not so weak' and 'better off' units to determine which rate from among the three-tier structure of interest rates should be applicable to which units. 'Weak' units were defined as those in respect of which erosion in paid-up capital and reserves was above 50 per cent, not so 'weak' units as those in respect of which such erosion was up to 50 per cent and better off units as those without such erosion. The entire assistance to 'weak units' was given at the concessional rate of 7.5 per cent while the concessional part of the assistance would get reduced in the case of "not so weak" and "better off" units on a grading scale, depending upon the financial position of the units.

Till the end of June 1980, the financial institutions had extended soft loans of Rs 275.9 crores at the concessional rate of 7.5 per cent per annum, Rs 36.8 crores at the rate of 9.5 per cent per annum and Rs 238.3 crores at 11 per cent per annum, resulting in a weighted average interest rate of 9.1 per cent per annum.

Beginning with March 1980, the three-tier structure of interest rates under the scheme had been changed to a two-tier structure under which the soft and normal components carry interest at 7.5 per cent and 11 per cent respectively. Besides, it was also decided that the lending rate applicable to the soft component where it exceeds 20 per cent of the respective loan should be reviewed after two to three years in each case so as to ensure that the concessional element is kept to the minimum, and only to the extent needed, *i.e.* till such time the units can bear the normal rate of interest.

In 1981, it was decided to extend the facility of loans for modernisation programmes to all industries, instead of

Table 4: Operations of soft loan scheme (IDBI, IFCI and ICICI): Position at the end of June 1980

(Amount in Rs crores)

Industry	Applications received		Sanctions		Disbursement		Pending applications	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Textiles	226	483.4	209	296.9	116	89.9	17	39.5
Cement	14	78.5	12	65.0	10	39.1	2	3.1
Sugar	23	50.4	23	38.0	13	20.9	—	—
Jute	20	60.8	20	39.0	4	3.9	—	—
Engineering	86	153 2	77	112 2	51	36.1	9	22.7
Total	369*	826 3	341	551.1	194	189.9	28	65.3

Note: * After adjusting for propossal rejected/withdrawn/closed.
SOURCE: Industrial Development Bank of India, **Annual Report 1979-80**

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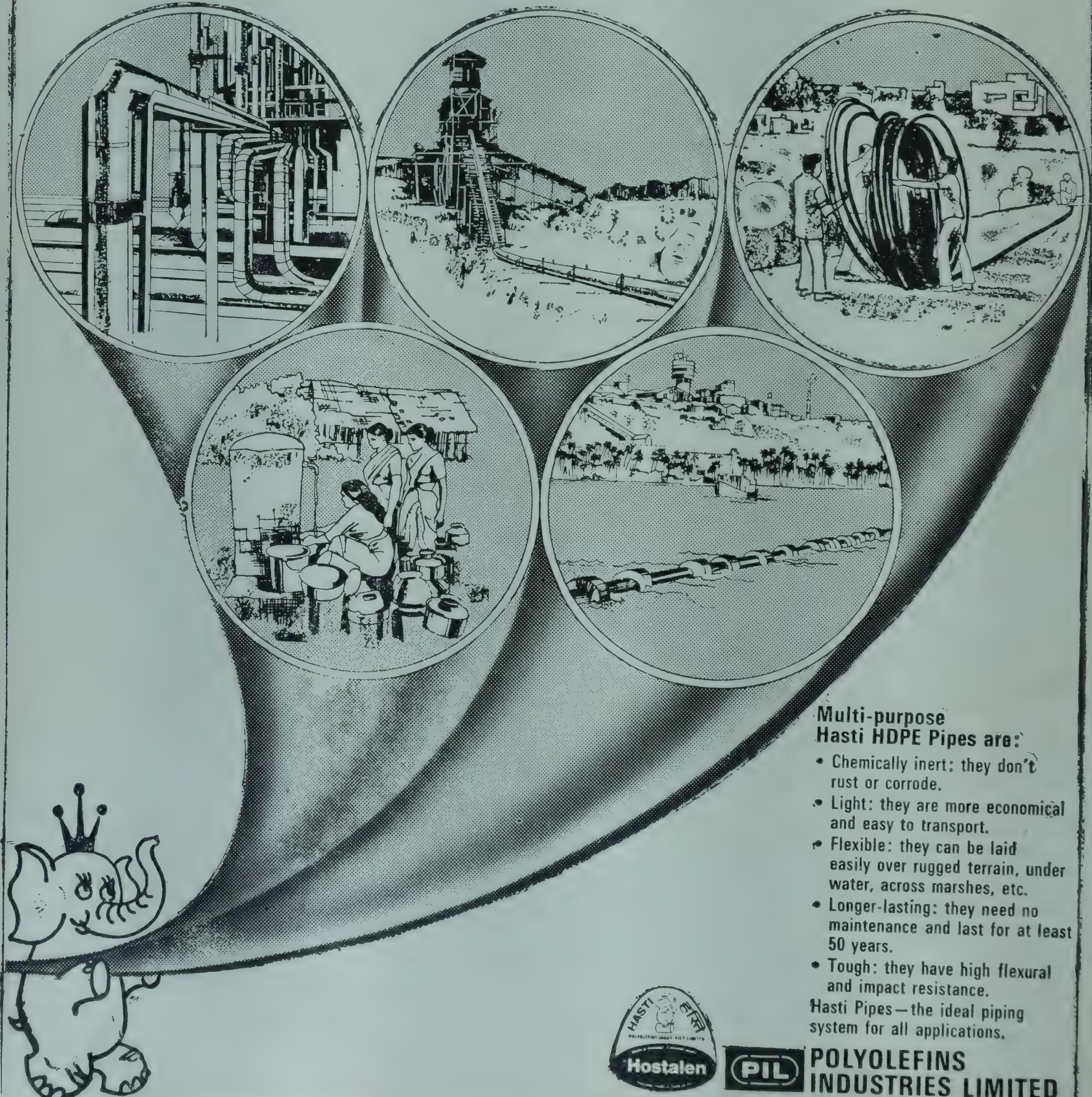

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only five as hitherto, but at normal rates of interest. These loans would continue to be exempt from convertibility stipulation.

IDBI: Rehabilitation finance

The Rehabilitation Finance Division (RFD), created by the IDBI, plays an important role in matters of surveillance of the performance of the sick units as also their rehabilitation. In fact, from 1978-79, a separate cell in the RFD started processing references emanating from banks and other financial institutions regarding sick units in their portfolio.

However, quite a few problems—administrative and bureaucratic—appear to be preventing the revival efforts from succeeding fully. Mr R. K. Talwar, the then chairman, IDBI, stated in his annual speech for 1979-80.

"It is often an uphill task to secure the consent of all the parties concerned to the package of revival measures formulated by IDBI. Even where a general consensus is reached at joint meetings, it takes several weeks or months before the consensus is reflected in formal decisions. The efficiency of the rehabilitation measures depends greatly upon the expedition and faith with which they are implemented. The delays may also arise because of differences between financial institutions and commercial banks. The solution lies in looking at the issues in the broad perspective of the banking system, which is mostly owned by the government. All that is necessary is a code of understanding among the commercial banks in order to avoid delay in implementing consortium decisions. As of now, this is an area of irritating bottlenecks".

Role of IRCI

In 1971-72, Industrial Reconstruction Corporation of India Ltd, (IRCI) was incorporated, with one of the objectives being to promote and operate schemes for industrial development of the country and in particular for the rehabilitation of industrial concerns. To achieve the task of reconstruction and the nursing of sick units back to health, the IRCI has adopted a two-pronged, strategy: to introduce professional management on modern lines in the units concerned; and to create a proper management outlook having regard to the social climate in which managements have to function. (See separate article on IRCI in this issue).

The central objective of IRCI is the revival and rehabilitation of sick and closed industries. The amount of loans sanctioned and disbursed by IRCI till the end of June 1980 amounted to Rs 80.41 crores pertaining to 94 units and Rs 69.87 crores pertaining to 92 units respectively. Rubber products as an industry group accounted for the highest amount of loan sanctioned (Rs 15.85 crores) followed by metal products (Rs 10.80 crores) and bicycles and accessories (Rs 10.55 crores). Among the industry groups for which loans were disbursed, rubber products accounted for the highest amount (Rs 15.10 crores) followed by bicycles and accessories (Rs 9.58 crores) and metal product (Rs 9 crores) (Table 5).

The purposewise break-up of loans sanctioned indicates that the highest amount was sanctioned for meeting the resource gap (Rs 26.76 crores) followed by that for margin money (Rs 19.96 crores), expansion and diversification (Rs 16.09 crores) and repayment of previous liabilities (Rs 10.35 crores). A similar break-up for disbursement reveals that the highest amount was for meeting resource gap (Rs 24.30 crores), followed by that for margin money (Rs 19.03 crores), expansion and diversification (Rs 10.78 crores) and repayment of previous liabilities (Rs 8.72 crores). The balances of sanctions and disbursements were for other purposes.

West Bengal accounted for the highest amount of loan sanctioned (Rs 69.81 crores) and disbursed (Rs 60.87 crores) followed by Maharashtra (Rs 4.76 crores and Rs 4.69 crores) (Table 6)

Revival: At what cost?

It is apparent from a review of measures taken to revive sick industrial units that a sizable amount of resources is being spent for the revival of these units by different bodies. While this may be unavoidable in view of the dimensions of the problem, the larger question that arises here is: What is the real cost of all these efforts? Are we going to evaluate these efforts in

Table 5 : Industrywise break-up of loan assistance(x) sanctioned (effective) and disbursed by IRCI as at the end of June, 1980

(Rs in lakhs)

Sl. No.	Industry Group	Loan Sanctioned (Effective)			Loan Disbursed*		
		No. of Units	Amount	%	No. of Units	Amount	%
1.	Food manufacturing (except beverages)	7	204.62	2.5	7	189.83	2.7
2.	Textiles— (i) Cotton ..	6	458.39	5.7	6	370.43	5.3
	(ii) Jute ..	4	716.59	8.9	4	633.66	9.1
3.	Rubber Products	6	1,584.79	19.7	6	1,509.58	21.6
4.	Chemicals & Pharmaceuticals	10	386.75	4.8	10	331.02	4.7
5.	Metal Products except Machinery and Transport Equipment	16	1,080.05	13.5	16	900.51	12.9
6.	Machinery except Electrical	5	426.03	5.3	5	412.04	6.0
7.	Electrical Machinery/ Equipment	12	421.53	5.2	11	345.70	4.9
8.	Transport Equipment						
	(i) Bicycles & accessories	10	1.055.46	13.1	10	957.93	13.7
	(ii) Waon Building ..	4	400.44	5.1	4	346.37	5.0
	(iii) Shipbuilding & Repair	1	686.58	8.5	1	588.00	8.4
9.	Other industries ..	13	619.77	7.7	12	401.71	5.7
	Total	94	8,041.00	100.0	92@	6986.78**	100.0

Notes : (x) Loan assistance includes term loan as well as hire-purchase assistance.

@ Does not include the Haryana based unit to which the Corporation has issued a guarantee and no loan.

* An amount of Rs 680.97 lakhs has been repaid by 31 units.

** Including debentures of Rs 9.95 lakhs.

SOURCE: Industrial Reconstruction Corporation of India, Annual Report—1979-80.

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terms of a cost benefit framework? Or are we going to treat the amount of resources spent on the revival measures as charity and therefore beyond questioning? At a time when the national economy is suffering from a poor management of resources, do we want to throw good money after bad in our efforts to revive sick units without a critical evaluation? Unless the cost of these resources is analysed in terms of the benefits derived therefrom, a doubt would persist that the national resources are being wasted away.

Besides, the Union Government is believed to be toying with the idea of exempting the management of sick units from the provisions of the Minimum Wages Act. In fact, one of the terms of reference of the committee set up by the RBI under the chairmanship of Mr T. Tiwari is to examine whether the sick units should be burdened with obligations like payment of minimum bonus and implementation of various wage awards, which may be having adverse effects on the rehabilitation programme. This should be regarded as the most shocking development. The purpose of all efforts aimed at reviving the sick industrial units is to protect employment. It is for this purpose that sizable amount of resources have been spent so far in this direction. The latest policy measure under consideration of the Union Government would be completely contrary to this objective. It would inspire the management of sick units after their nationalisation to give up all responsibility towards labour. When the Union Government does not allow management of private sector units to be so irresponsible, how can it take up such power and exempt units under its own management from provisions relating to labour welfare is beyond anybody's grasp.

Table 6: Statewise break-up of loan assistance (£) sanctioned (effective) and disbursed by IRCI as at the end of June 1979 and June 1980

(Rs in lakhs)

States/Union Territories	Loan Sanctioned (Effective)				Loan Disbursed			
	As on 30 June, 1979		As on 30 June, 1980		As on 30 June, 1979		As on 30 June, 1980	
	No. of Units	Amount	No. of Units	Amount	No. of Units	Amount	No. of Units	Amount
Andhra Pradesh..	2	36.65	1	11.65	1	11.64	1	11.64
Assam	1	3.20	1	3.20	1	2.31	1	2.31
Bihar	2	84.44	2	84.44	2	30.37	2	30.37
Delhi	1	93.30	1*	93.30	1	91.75	+1*	91.75
Gujarat ..	1	50.00	1	50.00	1	50.00	1	50.00
Haryana ..	1	52.54	1	52.54	—	—	—	—
Karnataka ..	1	18.08	1	18.08	1	16.58	1	16.58
Kerala	3	108.17	3	132.67	3	77.90	3	111.40
Maharashtra ..	4	478.60	3*	476.20	3	451.93	3*	468.90
Punjab	1	62.50	1	62.50	1	58.50	+1	58.50
Tamil Nadu ..	2	75.14	2	75.14	1	43.51	2	58.81
West Bengal ..	77	5,513.89	77*	6,981.28	76	4,753.33	+76*	6,086.52
Total	96	6,576.51	94	80,041.00	91	5,587.87	@92	6,986.78

Notes: (£) Loan Assistance includes term loans, as well as hire-purchase assistance.

* Two units of West Bengal also have factories in Maharashtra and U.P. One of the three units in Maharashtra has a factory in U.P. The one in Delhi also has factories in Maharashtra and U.P.

+ Three units situated in West Bengal and one each in Delhi and Punjab have paid back the Corporation's dues in full.

@ Does not include the Haryana based unit to which the Corporation has issued a guarantee but no loan.

SOURCE: Industrial Reconstruction Corporation of India, Annual Report, 1979-80.

IRCI

Growing burden of overdues

By COMMERCE RESEARCH BUREAU

THE Industrial Reconstruction Corporation of India Ltd (IRCI) was established in April 1971 as a specialised financial institution to provide financial assistance for the reconstruction and rehabilitation of sick industrial units. The IRCI was jointly promoted by the Industrial Development Bank of India (IDBI), the Industrial Finance Corporation of India (IFCI), the Industrial Credit and Investment Corporation of India Ltd (ICICI), the Life Insurance Corporation of India (LIC), the State Bank of India (SBI) and nationalised banks. The present chairman of the corporation is Mr T. Tiwari.

In regard to the corporation's sphere of activities, in the initial stages, its operations were confined mostly to the eastern regions of the country, particularly West Bengal, which had many sick industrial units in the early seventies. However, by the close of June 1980, the activities of IRCI had spread far and wide so as to cover the states of Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh and Union Territory of Delhi.

During 1980, IRCI, adopted a new strategy for revamping sick units. It was also proposed to work out a basic minimum programme of renovation and modernisation with newer processes and techniques for each unit under its care. Further in an effort to break through various operational difficulties found with sick companies, which had a greatly distorted debt-equity picture, the corporation had undertaken restructuring of the capital of some selected sick units.

By the end of June 1980 the total financial assistance sanctioned by the corporation, net of cancellations to 94 sick industrial units amounted to Rs 78.3 crores as compared with Rs 64.6 crores to 96 units at the end of June 1979. The corporation keeps a close watch on the utilisation of the disbursed funds by the units under the specific heads for which the assistance is sanctioned. The cumulative term loan disbursements at the end of June 1980 aggregated Rs 68.3 crores to 92 industrial units against Rs 55 crores to 91 units at the close of June 1979. The total disbursements was 87 per cent of the total sanctions, as compared to 85 per cent at the end of June 1979.

The industries assisted by the corporation cover a fairly wide range, and are broadly classified into nine groups—namely (1) food manufacturing, (2) textiles—cotton and jute, (3) rubber products, (4) chemicals and pharma-

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Table 1 : Statewise distribution of loans sanctioned and disbursed by IRCI as on June 30, 1980£

(Rs lakhs)

State/Union Territories	Loans sanctioned		Loans disbursed	
	No. of units	Amount	No. of units	Amount
Andhra Pradesh	1	11.65	1	11.64
Assam	1	3.20	1	2.31
Bihar	2	84.44	2	30.3
Delhi+	1*	93.30	1*	91.75
Gujarat	1	50.00	1	50.00
Haryana	1	52.54	—	—
Karnataka	1	18.08	1	16.58
Kerala	3	132.67	3	111.40
Maharashtra	3*	476.20	3*	468.90
Punjab+	1	62.50	1	58.50
Tamil Nadu	2	75.14	2	58.81
West Bengal+	77*	6,981.28	76*	6,086.52
Total	94	8,041.00	92@	6,986.78

Notes : (£) Loan assistance includes term loans, as well as hire-purchase assistance.

* Two units of West Bengal also have factories in Maharashtra and U.P. One of the three units in Maharashtra has a factory in U.P. The one in Delhi has also factories in Maharashtra and U.P.

+ Three units situated in West Bengal and one each in Delhi and Punjab have paid back the Corporation's dues in full.

@ Does not include a Haryana based unit for which the Corporation has issued a guarantee but no loan.

ceuticals, (5) metal products, (6) machinery (except electrical), (7) electrical machinery/equipment, (8) transport equipment (including bicycles), and (9) other industries including ceramics, leather, printing, etc.

During 1979-80, the IRCI received a total of 809 proposals for reconstruction assistance. Of these 166 proposals were sanctioned. Reconstruction assistance (gross) worth Rs 14.1 crores (Rs 11.4 crores in 1978-79) in the form of term loans was sanctioned by the IRCI to 37 industrial units.

The data relating to purpose-wise, state-wise and industry-wise distribution of loans sanctioned and disbursed by IRCI since its inception till the year ended June 1980 showed that of Rs 69.9 crores disbursed, the largest amount (Rs 24.3 crores or 34.8 per cent of the total) had been for meeting the resource gap. The second largest amount (Rs 19.0 crores or 27.2 per cent of the total) was disbursed for the purpose of meeting the margin money working capital requirement. Next in order came the disbursement for meeting expansion/renovation/balancing equipment/diversification needs (Rs 10.8 crores or 15.4 per cent).

Tables 1 and 2 present a detailed picture of the statewise and industrywise distribution of loans sanctioned and disbursed by the IRCI as at the close of June 30, 1980.

The operational strategies of the IRCI lay emphasis on selectivity of the units to be taken up for assistance based on the prospects of their long-term viability, the need for the restructuring of capital and liabilities of the units, strengthening of the management set up, and securing corporate support from public sector undertakings engaged in related areas.

In 1979-80, the rate of interest on loans directly disbursed by the Corporation was 8.5 per cent. The concessional rate for small-scale units and for units situated in backward areas was 7.5 per cent and 7 per cent respectively.

In 1973, the corporation, along with IDBI, other financial institutions and banks, promoted the Textile Processing Corporation of India Ltd (TPCI) for providing facilities for textile processing. The TPCI began its operations in 1976-77. TPCI's sales value increased from Rs 40.1 lakhs in 1977-78 to Rs 88.6 lakhs in 1978-79 and Rs 88.2 lakhs in 1979-80. However, it incurred a loss of Rs 46.8 lakhs in 1979-80 against losses of Rs 44.2 lakhs in 1978-79 and of Rs 55.4 lakhs in 1977-78. During 1979-80, a sum of Rs 18 lakhs was sanctioned to TPCI by the IRCI for purchase of diesel generating sets.

Finances : The paid-up capital of the corporation as at the end of June 30, 1980 was Rs 15 crores. Its market borrowings till the end of June 1980 amounted to Rs 21.7 crores. The Central Government granted a loan of Rs 10 crores during the year ended June 1980; the interest on this is eligible for subsidy from the Central Government. The total borrowings from the Central Government (inclusive of initial interest free loan of Rs 10 crores) as at the

Table 2 : Industrywise distribution of loans sanctioned and disbursed by IRCI as on June 30, 1980

(Rs lakhs)

Sl. No.	Industry group	Loans sanctioned (Effective)			Loans disbursed*		
		No. of units	Amount	%	No. of units	Amount	%
1.	Food manufacturing (except beverages)	7	204.62	2.5	7	189.83	2.7
2.	Textiles— (i) Cotton	6	458.39	5.7	6	370.43	5.3
	(ii) Jute	4	716.59	8.9	4	633.66	9.1
3.	Rubber products	6	1,584.79	19.7	6	1,509.58	21.6
4.	Chemicals and pharmaceuticals	10	386.75	4.8	10	331.02	4.7
5.	Metal products except machinery and transport equipment	16	1,080.05	13.5	16	900.51	12.9
6.	Machinery (except electrical)	5	426.03	5.3	5	412.04	6.0
7.	Electrical machinery/equipment	12	421.53	5.2	11	345.70	4.9
8.	Transport equipment						
	(i) Bicycles and accessories	10	1,055.46	13.1	10	957.93	13.7
	(ii) Wagon building	4	400.44	5.1	4	346.37	5.0
	(iii) Shipbuildings and repair	1	686.58	8.5	1	588.00	8.4
9.	Other industries	13	619.77	7.7	12	401.71	5.7
	Total	94	8,041.00	100.0	92@	6,986.78**	100.0

Notes : Loan assistance includes term loan as well as hire-purchase assistance.

@ Does not include a Haryana based unit to which the Corporation has issued a guarantee but no loan.

* An amount of Rs. 680.97 lakhs has been repaid by 31 units.

** Includes debentures of Rs. 9.95 lakhs.

close of June 1980, stood at Rs 36.5 crores.

The Corporation's operations during the year ended June 1980 resulted in a reduced net loss of Rs 18.84 lakhs (after making a provision of Rs 43.0 lakhs towards bad and doubtful debts), as compared to the net loss of Rs 46.5 lakhs in the previous year.

Loan recovery

As at the close of June 30, 1980, cumulative instalment of loans due for recovery by the corporation amounted to Rs 13.35 crores, of which an amount of Rs 72 lakhs was recovered. Apart from this, a sum of Rs 3.2 crores was received during the year under review from the Commissioner of Payments in respect of claims relating to two nationalised units, *viz*, Burn & Co Ltd and Indian Standard Wagon Company Ltd. Thus, the principal amount outstanding as at the close of June 30, 1980 was about Rs 9.0 crores. Apart from this, an amount of Rs 1.1 crore was also outstanding by way of principal and interest in respect of three assisted units which have been nationalised.

Table 3: Recovery performance of IRCI

	Instalments of loans due for recovery* (Rs lakhs)	Amount actually realised (Rs lakhs)	(2) as per cent of (1)
	1	2	3
1977-78	624.19	75.30	12
1978-79	604.00	37.83	6
1979-80	1,335.00	72.00	5

* Includes arrears of loans brought forward from the previous years

The data relating to instalments of loans due for recovery including arrears from previous year brought forward, amounts actually realised and recovery percentage for the past three years are presented in Table 3.

The amount of loans realised during 1979-80 was higher at Rs 72.00 lakhs (Rs 37.83 lakhs in 1978-79). However, amounts realised as a percentage of loans due for recovery including arrears brought forward from the previous years declined from 12 per cent in 1977-78 to 6 per cent in 1978-79 and further to 5 per cent in 1979-80. At the same time, the amounts of arrears brought forward from previous years were on the increase from Rs 383 lakhs as at the end of 1977-78 to Rs 451 lakhs as at the end of 1978-79 and again to Rs 536 lakhs as at the end of 1979-80 thereby showing deterioration in recovery performance.

Financing fixed and working capital

By P. CHATTOPADHYAY

THE Reserve Bank of India has recently set up a committee for looking into the problems being faced by commercial banks and term lending institutions for reviving sick industries. This decision of the Reserve Bank has had the background of a deepening crisis caused by an upward trend in industrial sickness. The twelve-month period up to June 1980 witnessed quite a number of closed large and medium scale enterprises revived with bank and institutional assistance. The number, to be sure, has risen to 390 from 345 during the previous year. The number of sick enterprises so revived was of the order of 20,700. All this has meant that more than Rs 1,500 crores of bank credit has remained blocked in sick enterprises in the large and medium scale sectors and Rs 250 crores in the small scale sector. The cost of this assistance becomes many times more if one considers the uncertainty enveloping both return of loan and return on loan. Putting back these units on the rail is a totally different matter; for these units have continued to remain on the sick list for a long time before succumbing to the untold atmospheric hostility. This naturally calls for concern on the part of the Reserve Bank, involving as it does gargantuan financial stake from the point of view of banks and term lending institutions in the industrial sector.

It has also become quite fashionable among professional financial experts to claim proficiency in matters concerning industrial sickness, embracing both identification of such sickness and administration of cures as also predicting such sickness on the basis of some cognizable criteria, thrown up by their concerned intellectual disciplines. In the face of all these attempts to identify signs of sickness in the industrial sector, we have shown widely the knack of going round and round the main issues and highlighting wrong reasons. Needles in the haystack have been sought to be uncovered with lots of noise. That this wide prevalence of industrial ailments of different varieties is our own creation is not as widely recognised. Indeed, there appears to be different factors vying with each other to cause damage to healthy running of enterprises on recognised premises which we ourselves have prescribed in terms of different laws, regulations made thereunder and executive orders issued by government from different ministries, and departments. Healthy units have remained suspect for quite some time now.

Naturally, the government and the banking system have taken upon themselves the responsibility of deploying funds in causing cure to sick units involving in the process pouring money in fathomless pits. That we have jerked ourselves at the wrong end of the stick should not preclude in any way our attempts to be rational in dealing with enterprises, both corporate and non-corporate, both small and large scale enterprises and both public and private sector enterprises. Introspection being somewhat absent, committees after committees have attempted to decipher and disaggregate the viruses that cause the disease, often not quite appreciating that the signs and symptoms of such sickness would not require any searching analysis; they are as clear as day light. We owe an explanation.

It has been generally made out that industrial sickness has been primarily caused by 'stringent infrastructural con-

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straints and disturbed industrial relations'. Though these are indeed important factors behind the malfunctioning of several enterprises belonging to different sectors of the economy, in a major way, sickness has remained ingrained in the policies formulated by the Government in the Ministry of Finance and the Reserve Bank of India. These policies relate to imposition of direct and indirect taxes, stringent bank credit, policies guiding the sanction and disbursement of funds for new industrial units and absence of co-ordination among different departments of government such as Railways, Ministries of Commerce, Finance and Industry.

It has been widely believed that while the institution of managing agency has been abolished, government has not yet been able to provide an acceptable substitute for some of the practices that the managing agency houses initiated, particularly with regard to inter-enterprise transfer of funds for tiding over short term difficulties. On the other hand, it has been widely noticed that government policy for both sanction and disbursement of funds for new industrial units relates essentially to long term capital requirements while working capital requirements are left to fend for themselves. In spite of all the discussions that have gone on for a considerable period of time regarding banks' shaking off the traditional approaches to collateral securities, the actual practice in the branches of different banks has remained wide of the mark. The same traditions continue unabated and professional assessment of feasibility reports has remained generally conspicuous by its absence.

Though inadequacy of infrastructural facilities and strained industrial relations have been common in many areas, affecting their growth and operational efficiency, they should not have been entirely unknown right at time the feasibility reports were being considered. It should be noted that, thanks to the drive and initiative of some financial institutions like the SICOM, entrepreneurs have found their adventures fruitful. In a majority of cases, however, problems have multiplied to come in the way of better performance. Some of these problems were easily noticeable but several were not.

Differential investment required for meeting the infrastructural needs of particular areas could be determined and specifically accommodated in the industry plans for these areas, either by way of subsidies or grants or loans or even a combination of all these three. Even then, critics underline that the differential benefits of government's incentives for promoting industries in backward areas, industries in rural areas and industries away from the main cities would not compare favourably with the extra investment necessary for establishing and running industrial units in these areas. During the last decade and a half government policies have sought to create an atmosphere for entrepreneurs to establish units in relatively untrodden areas. Cost benefit analysis of such a step, however, remains to be done.

Liquidity crisis has all along remained a much bigger factor than all the other factors put together in causing industrial sickness. Part of this crisis is created by the fact that under the accrual system of accounting, units are made liable to pay advance tax, declare dividend and pay such dividends to shareholders within a specific period of time in cash and present an unrealistic flourish in the accounts which are on better than partial truths. Thus, the paper profits shown in the accounts, a large part of which remain unrealised, create problems as regards payment of bonus, etc to labour, payment of direct and indirect taxes and so on. Some relaxation allowed by government, some concessions given by government to such units, some appreciatoin of the difficulties actually experienced by these enterprises and perhaps some long rope given to them could have saved government a large part of the expenditure that has ultimately gone to such units by way of sickness benefits. A timely stitch is the crux of the matter in this regard of which we do not seem much aware even at this time of day.

While the *Report on Currency and Finance*, 1979-80 ascribes inadequacy of infrastructure and strained industrial relations as the factors causing industrial sickness, some of the policies pursued by the Reserve Bank of India are no less responsible in making units walk on the tight rope all the time. One in this context appreciates government's renewed thrust on the relatively unbanked sectors to receive priority of allocation of bank funds. It is also equally necessary to see that the existing industrial structure does not suffer just because government is intent to jerk the other end of the stick. The Tandon Committee norms, the Chore Committee recommendations and the general approach towards financing running industrial enterprises have created a constructive atmosphere in which normal functioning of industrial and commercial enterprises has come under severe curbs. And it is sure that pursuing the present package of policies of credit curb to these units will witness a growing number of sick units clamouring for government assistance to be put back on the rail. Huge funds have already been canalised to the sick units to put them back on track. Their growing number year to year, however, suggests that such canalisation of funds has not had the same salutary effect as one would expect.

Money coming too late becomes worthless because the chances of economic deployment of such money get reduced as the units come under different ailments essentially caused by lack of funds. In the aforementioned situations, a reference to the present picture of industrial sickness and outstanding bank credit would be revealing. Table I presents the picture as it relates to end-June 1978 and end-June, 1979. As evident from figures presented in the table, in every industry category excepting cement, the number of sick industrial units has shown an increase as between the years 1978-79. In the case of cement industry, the number of units remained the same during the period. Thus, from 325 units involving an amount of outstanding bank credit of Rs 956.08 crores in 1978, the number of units rose to 345 involving an amount of outstanding bank credit of Rs 1,101.72 crores in 1979. In the cases of engineering units, the number rose from 112 to 115, in cotton textiles from 78 to 84, in sugar from 31 to 35, in jute textiles from 31 to 33 and rubber from 5 to 7 units.

The statewise and industrywise composition of bank credit to sick industrial undertakings enjoying aggregate credit limit of Rs 1 crore and above as at the end of June 1979 has borne witness to the wide prevalence of various ailments irrespective of industry groups or state boundaries, though West Bengal heads the list of sick units with 84, followed by Maharashtra with 71, Tamil Nadu and Uttar Pradesh with 36 and Gujarat with 35. Additional information available up to the end of March, 1980 brings to the fore that the combined investment of all the term lending institutions in industry was of the order of Rs 11,575 crores and that of the combined commercial banks came to Rs 8,963 crores of outstanding credit up to the end of June, 1979.

It has been alleged that the combined share of commercial banks and financial institutions has been as high as 75 per cent. The prevading industrial sick-

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ness and its year to year spread have not only slowed down the pace of new investment but also affected the profitability of the lending institutions themselves in several ways. Large stakes of financial institutions and commercail banks are thus to be viewed seriously and unless something is done about the phenomenon of sickness, there does not appear to be any easy going back on these issues. In several ways, the funds only trickle down to the recipient units and shorn of the working capital the entrepreneurs do not find their going easier either. Though costs are incurred on a wide scale in terms of funds lent and blocked, interest rates delayed and becoming doubtful and the extra effort required for halting these defaults cost effectiveness of the expenditure has never been looked into.

In this respect, the case of Japan comes to mind easily. In Japan, it may be mentioned, working capital requirements are accommodated in the funds lent by financial institutions and the entrepreneurs do not have to run about here, there and everywhere for making both ends meet. In the circimstances, a drastic change in lending policy is called for, particularly for accommodating the working capital needs of not only new entrepreneurs and enterprises but also sick units. The rebates and reliefs granted under the Income Tax Act have the precondition that to be entitled to such rebates and reliefs the enterprises must, first of all, earn a profit which they find it almost impossible in the face of multiplicity of constraints all around.

It is easy to understand and appreciate the anxiety of the government to hold inflation. It is not as easy to understand that what we call inflationary price rise is, in fact, a price push of commodities caused in a major way by the heavy incidence of indirect taxes. Whereas money is spread thinly by the government under various policies over a wide sector of economic activities, the so-called private sectors, the netting back is attempted only where money is immediately identifiable. One should not quarrel with the sectoral differentiation for the purpose of allocation of credit. One however, feels awed by the fact that government wants to get back this money through indirect taxation including those commodities which are consumed by rural folks on a wide scale, people of middle income groups and others in the urban areas.

The aggregate picture afforded by the industrial sector in this country is one of pervading sickness with raging uncertainty as to how long a unit will be in a state of health or in a neutral zone of neither health nor sickness till it rides on the sick bed. A total reconsideration of banking policy, particularly for financing both fixed and working capital, has become essential. If the right of healthy existence is denied to units, becoming over sympathetic when they have grown sick is a pointless exercise.

A reference here to the government policy for revival of sick units is relevant. It has been reported that a comprehensive policy for reviving sick units and preventing spread of industrial sickness is being evolved by the Union Government on the basis of a note prepared by the Central Ministry of Industry. Government has recognised that the equity base of small scale units is weak and requires to be strengthened by the creation of an equity fund for the small scale sector to be administered either by the Reserve Bank of India or by the Industrial Development Bank of India. The credit monitoring system by commercial banks is also sought to be strengthened and streamlined. On the other hand, the supply of raw material and other essential inputs to small units has been sought to be augmented and regularised. Albeit the late recognition of these biting problems, even now the other aspects of working capital requirements stand somewhat underplayed. The major bottleneck experienced by the small scale units is not merely supply of raw materials or equity funds as such. It is the totality of shortfalls that has counted significantly affecting the economics ofoperations of the small scale sector, contrarily, according to the report, government continues to be averse to extension of financial assistance, particularly short term working capital needs, to large scale private sector industries. This is as it should not be; for, it is the larger scale institutions in the industrial sector which, in fact, sustain the total industrial activity in the country.

A look at the Reserve Bank of India studies in company finances will have convinced the decision makers that capital composition in the corporate sector is heavily skewed, a few of the companies having a major share of the capital and a large number of companies have per unit capital grossly inadequate. If government does not do something diametrically opposite to the current policies, it will be a question of time as to when industrial and commercial enterprises ride on the sick bed one after the other. Such frivolous solutions as are offered under Section 72A of the Income Tax Act also require reconsideration, particularly in view of the fact that merger of sick units with healthier units *prima facie* requires calculative approaches to the possibilities of the sick units and if the patch of capital here, slight revamping touch there or both would put them back on the rail, it could be done even without the merger policy. To ensure perpetual existence of corporate enterprises, it is essential that not only a certain rate of profitability be allowed but also that the units should be allowed to plough back such profits more and more.

Table I : Sick industrial units and outstanding bank credit to them

(Rs crores)

Industry	End-June 1978				End-June 1979			
	No. of units	Percentage	Amount of outstanding Bank credit	Percentage	No. of units	Percentage	Amountof outstanding Bank credit	Percentage
1. Engineering (including iron and steel) ..	112	34.46	286.18	29.91	115	33.33	337.25	30.61
2. Cotton textiles ..	78	24.00	263.65	27.58	84	24.35	287.71	26.11
3. Chemicals	21	6.46	117.95	12.34	23	6.67	135.04	12.26
4. Sugar..	31	9.54	79.48	8.32	35	10.14	100.95	9.16
5. Jute textiles	31	9.54	76.58	8.02	33	9.57	89.75	8.15
6. Rubber	5	1.54	25.17	2.63	7	2.03	34.07	3.09
7. Cement	4	1.23	13.69	1.43	4	1.16	13.21	1.20
8. Miscellaneous ..	43	13.23	93.38	9.77	44	12.75	103.74	9.42
Total	325	100.00	956.08	100.00	345	100.00	1,101.72	100.00

(**Reporton Currency and Finance, 1979-80,** Volume I, p. 42).

Banks: Nursing a sick unit

By K. HANUMANTHAPPA & V. PRASANNA BHAT

SICKNESS in an industry requires nursing, if not hospitalisation, like human sickness. The most widely accepted definition of sickness is the one formulated by Reserve Bank of India, according to which a sick unit is that which has suffered cash losses continuously for a period of three years even before providing for depreciation and the current and debt equity ratios are adverse.

A sick person in a house gets special attention, nutritious supplements and is given rest. Similarly, a sick industry seeking revival under a nursing programme gets a concessional interest rate for its working capital finance, liberal terms with respect to margin stipulations of securities and also is exempted temporarily from the rigours of guidelines like Tandon Committee norms.

While it is very essential that genuine sickness in an industrial unit must be nursed back to its normalcy, care must be taken to see that only needy and really sick units are nursed. Especially so, since the concessions offered to a sick unit coming under a nursing scheme of a financial institution, are so tempting that even good industrial units with inept managements try to pass of themselves as sick units so as to avail of the substantial benefits. In normal walk of life also we come across with people who despite their perfectly normal health pose themselves as sick and get admitted into convenient hospitals to escape the onslaught of legal proceedings, disciplinary procedure in their work situation or simply for the sake of availing specialised attention thus preventing genuine and needy cases of ailing people from obtaining the essential medical care and attention.

Just as the medical science has diagnostic techniques for identifying the various ailments there are some well studied principles and criteria in signalling of sickness in industries. Qualitative description of the symptoms and statistical and quantitative formulae are available in this regard. While qualitative description of symptoms help the identification, the precise estimate of sickness and the nursability or otherwise of the sickness of a unit is possible only with the aid of statistical and quantitative techniques.

Before embarking on a nursing programme it is important to know whether a given unit is beyond redemption. Just as a doctor pleads his inability to accept a fatal case, financial institutions may not be in a position to come forward to under-take a nursing programme of a sick unit, unless the viability or otherwise of such a programme is ascertainable from proven statistical or quantitive techniques.

The causes for sickness of a unit and the appearance of such symptoms have been widely studied. The results of such studies have contributed amply towards the timely prevention of a unit becoming sick. The saying "Prevention is better than cure" is appropriate and relevant in the context of industrial sickness too. However, the theme of this paper is the development of the concept of 'Nursability' or otherwise of a given sick unit. Assuming that an industrial unit has become sick due to many or one of the several causes identified and has therefore, approached a financial institution with a proposal to undertake a nursing programme, the bank or the financial institution apart from scrutinising other things, must essentially apply such statistical techniques in order to know the feasibility or otherwise of the proposal in question.

The pioneering work in the development of such models was done in USA. In the UK a variation of the USA formula was accepted as suitable. The model derived in the USA is known as Altmann Criterion or 'Z' model, which has the following form

$$Z = 0.012X_1 + 0.014X_2 + 0.033X_3 + 0.06X_4 + 0.010X_5$$

where

$$X_1 = \frac{\text{Working capital}}{\text{total assets}}$$

$$X_2 = \frac{\text{retained earnings per balance sheet}}{\text{total assets}}$$

$$X_3 = \frac{\text{earnings before interest and taxes}}{\text{total assets}}$$

$$X_4 = \frac{\text{total market value of equity}}{\text{book value of total debt}}$$

$$X_5 = \frac{\text{sales}}{\text{total assets}}$$

By the application of this model for a series of units, it was statistically inferred that industries with a Z value of '3' cannot fail and, therefore, need not be considered as sick. Units with Z value in the region of '1.8' and '3' are considered as sick and can be nursed if a suitable nursing programme could be conceived and executed. Units with a Z score less than 1.8 are by and large sick industries which are beyond redemption as revealed by experience.

The model in vogue in the UK was developed by Messers Taffler and Tisshaw which goes with the name of Z model

$$Z = C_0 + 0.53R_1 + 0.13R_2 + 0.18R_3 + 0.16R_4$$

where 'C_0' is the adjustment constant and

$$R_1 = \frac{\text{Profit before tax}}{\text{Current liabilities}}$$

$$R_2 = \frac{\text{Current assets}}{\text{total liabilities}}$$

$$R_3 = \frac{\text{Current liabilities}}{\text{total assets}}$$

$$R_4 = \frac{\text{immediate assets} - \text{current liabilities}}{\text{operating costs excluding depreciation}}$$

'C_0' is a constant which is determined for a particular country based on business conditions and statutory provisions. In India this statistical technique was employed by Mr Bhaskar Banerjee and the problem of the constant 'C_0' was solved by adopting the differential technique by shifting the cut-off point to a positive Z score.

The objective of making mention of the above models is to emphasise that with the aid of such quantitative techniques it is possible to know whether the sick unit under question is a viable proposition for a nursing scheme. Moreover it helps to eliminate such units which are not sick, but which try to pass off themselves as sick ones with a motive of simply availing the wide range of concessions thrown open to sick units. It is human experience that a highly fondled child becomes a spoilt child. Similarly, 'nursing' healthy units which seek concessions under the guise of 'sickness' can cause not only damage to the industry but also prevents a needy and genuine unit from availing of such benefits.

Next consideration in the 'concept' of nursability is whether the needed technical and financial resources are available with the financial institution which proposes to undertake a nursing

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Dr Hanumanthappa is Associate Professor of Commerce, Bangalore University and Mr Prasanna Bhat is manager, Karnataka Bank Limited.

programme. Just as a doctor verifies whether the needed medicine and medical equipment are available before admitting a patient, a financial institution must examine whether it can effectively provide consultancy in the field of production, marketing, personnel, management and finance, depending on the cause of sickness. In fact the financial institution must be even prepared to depute an expert or an external qualified consultant not only to supervise the operations of the industry but also to participate in the board of the company either as an observer or as a nominee director depending upon the gravity of the situation and the extent of sickness.

Mere administration of doses of financial help by financing institution does not solve the problem of industrial sickness. The concept of nursability envisages much more. It is the practical experience of one of the authors wherein he was actively involved in a nursing programme, the institution had to not only finance in appropriate doses during critical situations but also had to suggest the removal of certain insincere and inefficient employees from the rolls of the industry, apart from suggesting appropriate changes in production planning, material control, marketing preference and such other managerial skills. A series of concessions alone do not solve the problem of sickness, what is also needed is a close watching of the day to day working capital management and fixing up of priorities in the matter of payment.

Due to increased participation by various financing institutions like banks, IDBI, ICICI, LIC, UTI etc, in the operations of a company and also due to the availability of needed expertise in almost all such institutions, it is definitely possible to have a close watch on the financial position of a company and prevent the same from becoming sick. In the event of such a unit becoming sick, inspite of precautionary measures the concept of nursability can be effective employed and a scheme of nursing can be worked out if the unit is nursable as described in the above paragraphs. However, if the unit is not nursable either a merger or liquidation or such other steps are the other alternatives which may be appropriately selected.

References

1) Bhaskar Banerjee, **Application of Statistical Techniques in Identification and Signalling of Sickness,** The Chartered Accountant, May 1979, P. 1008.
2) Navin Chandra Joshi, **Industrial Sickness And Banks,** The Journal of the Indian Institute of Bankers, July-September 1979, P. 156.
3) L. C. Gupta, **Public Financial Institutions and Control of Companies in India,** The Chartered Accountant, May 1979, P. 995.
4) Proceedings of symposium on '**Management of Sick Units** under the banner of BMA and Garden City Jaycees sponsored by KSFC and KSIIDC on September 26, 1980 in Bangalore.

SINGER SEWING MACHINE COMPANY

207, DR. D. N. ROAD, BOMBAY-400 001

NOTICE

It is hereby notified for the information of the public that Singer Sewing Machine Company propose to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 23 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval to its scheme of merger/amalgamation with the Indian Sewing Machine Company Limited. Brief particulars of the scheme are as under:

(i) Name and address of the applicant undertaking.	Singer Sewing Machine Company, Indian Branch. 207, Dr. D. N. Road, Bombay-400 001.	
(ii) Management structure of undertaking(s) proposed to be merged/amalgamated.	Singer Sewing Machine Company, Indian Branch General Manager	Indian Sewing Machine Company Ltd Managing Director
(iii) Capital structure of undertaking(s) proposed to be merged/amalgamated.	Rs. 170 lakhs represented by unremitted profits and merchandise invoices.	Athorised Rs. 3 crores. Issued and Paid up Rs. 70.
(iv) Present activities of the undertaking(s) proposed to be merged/amalgamated.	Marketing of Domestic and Industrial Sewing Machines, Knitting Machines, Needles, Oil Parts and Accessories.	Nil
(v) Reasons, in brief, for the proposed merger/amalgamation.	To comply with the Foreign Exchange Regulation Act, 1973 as required by the Reserve Bank of India, whereby subject to the necessary approvals, ISMACO will take over the Indian business of Singer Sewing Machine Co.	
(vi) Details of the exchange ratio/consideration proposed for shareholders/creditors, etc. of the amalgamated/merged undertaking.	As per the directive of the Reserve Bank of India, the consideration to be paid by ISMACO for the take over of the business of the Indian Branch of SSMCO is Rs. 170 lakhs.	

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

A. J. WOOD
General Manager
SINGER SEWING MACHINE COMPANY

Dated this day of August 19, 1981.

Inadeqate shipping services

By P. C. MAHANTI

EASTERN INDIA TODAY

CALCUTTA

EASTERN India's long-standing problem about inadequate shipping services compared to what the exporters need had a fair airing at the recent annual meeting of the Eastern India Shipper's Association here. Mr Sanjoy Sen, a particularly effective and articulate spokesman of the shippers' interests. explained the basic difficulties of the region, one of which was that Calcutta does not have the same shipping opportunities to far diverse destinations as Bombay has.

The reason is geographical in the first place. Calcutta does not figure in the cross roads of major international trade routes. The second major reason is the total dependence of the coast for ocean transport on the liner conferences. Indeed the eastern coast has the worst of both the worlds and does not get the benefit of competition in the liner trades as the countries in South-East Asia and East Asia do. For example, scrapping of the pooling arrangement among the members of the century-old India-Pakistan-Bangladesh conference has not produced much relief to the shippers in the region. However, the formation of the Indian container lines among the leading Indian shipping companies is a welcome development and should help Indian shippers if it continues to remain service-oriented as the professed aim.

Increasing containerisation of cargo is another hopeful development. The ports of Calcutta and Haldia which are trying to attract container traffic to increase the volume of cargo handled by them could do this more successfully if certain infrastructural handicaps are removed. Haldia especially suffers from a number of infrastructural constraints. It is now ready as a modern container handling terminal but due to the absence of basic facilities like road transport, telephone communications, arrangements for overnight stay etc the port is not attracting sufficient container traffic and the little traffic that it does handle creates enormous problems for both shipping lines and the shippers. There is not even a container freight station.

According to present plans arrangements will be made to move containers by barges from Calcutta to Haldia, in fac a container link terminal at a Garden Reach jetty for this purpose is being set up. Provided the cost is reasonable it should help Haldia to handle more container traffic in this way. The idea of moving containers by barges from north-east India to Haldia should also be pursued for Haldia serves the same hinterland as Calcutta and greater use of inland water transport should help the country's tea and other exports as the cost would be very much cheaper than transport by road or rail.

At Calcutta port, a shed has been allotted at the Netaji Subhash docks exclusively for the purpose of handling container traffic. Yet as Mr Sen points out there is no worthwhile plan till today to develop container handling facilities at Calcutta port step-by-step to a point where the major part of the general or break bulk cargo that passes through the port can be carried by container vessels. It is time also some thought was given to monitoring the traffic pattern at Calcutta port and prepare a master plan for its development. Considering the perpetual conditions of congestion at Bombay port and lately in Madras, Calcutta port could be modernised and developed to handle much more traffic than now.

From a peak of 11 million tonnes in the mid-sixties Calcutta handled only 3.5 million tonnes of cargo last year. Together with Haldia the entire port complex handled about eight million tonnes. This is less than 10 per cent of the national total of about 70 million tonnes for all the 10 major ports taken together. At one time Calcutta port handled 50 per cent of the country's exports and was thus the premier export port and 25 per cent of imports. The total volume then was smaller but there is no doubt that the port has declined in importance due to hydrological hazards of the river on which it is situated and ever increasing size of ocean carriers which can no longer call at this port due to draft limitations. Haldia was thought to be the remedy. It is some 65 km downstream and does not suffer from the shipping problems of Calcutta as the river from that point at Haldia up to the sea is rather deep and does not get silted at the stretch between Calcutta and Haldia does.

The Farakka barrage has brought some relief yet considerable dredging of the river is essential to maintain the shipping channel with a reasonable degree of draft to permit the vessels to enter and exit without any serious difficulty.

Joint ventures

The West Bengal Industrial Development Corporation has still ample faith in joint ventures, the failure of the Webel tyre project notwithstanding. The reason cited that a modern tyre plant in the country needs to utilise 85 per cent of capacity only to break even is not very convincing. In any case the private partner backed out at the last minute and the project could no longer be taken up as a joint venture on the proposed pattern. The question whether the WBIDC is looking closely into the capabilities and credentials of private partners before deciding on a project is often being asked. The same thing happened to Purulia cement project also. However, the WBIDC has shown greater tenacity in the latter case and has persuaded the Cement Corporation of India to set up the plant in Purulia district as a joint venture.

West Bengal Scooters, another joint venture, is limping along and incurring losses. The plan now is to diversify producton. Rolling of alloy and special steel is one of the lines being considered. The chairman, Mr Tejmoy Ghosh, does not want to give up in this case for he says closure will mean unemployment of a large number of people.

He also would like to publicise all success stories. The Darjeeling plant to assemble wrist watch components is a successful venture. It is a joint project with Hindustan Machine Tools. The annual capacity of 250,000 pieces a year has been reached and a profit is being earned. The project will be diversified in due course to make watch casings as well. A television joint venture is a success a well.

As for new joint ventures with promise of success mention may be made of the tungsten filament-making unit being put up in collaboration with the Andrew Yule at Kalyani and another to make mettalic anhydride at the same place and yet, one more, to make explosives in Birbhum district in collaboration with IDL Chemicals of Hyderabad.

BOOKS & IDEAS

An honest observer's viewpoint

India—The Turbulent Half Decade

by K. N. Subrahmanya

Southern Economist Private Ltd., 106-108 *Saleh Ahmed Building, Infantry Road, Bangalore* 560 001; 1981; *Pages vii*+200; *Price Rs* 65.

This is a collection of articles written by Mr K. N. Subrahmanya as editor of *Southern Economist* and published in the magazine between 1975 and 1980, except for some months during the Emergency, which lasted from June 1975 to March, 1977 and which put a severe restraint upon the freedom of expression in the country. This period in the country's history was dominated by politics in a way perhaps no other period was. No doubt the economic crisis—caused by the failure of the monsoon is more than one year in several states and the poor performance on the industrial front and elsewhere—was very much present. But the imposition of the emergency tended to draw attention to the political factors and the economic factors were pushed to the background in the minds of the people. The emergence of the Janata Party as the ruling party in the wake of the end of the emergency did not alter this preoccupation with politics. That explains in a large measure why most of the 35 articles of Mr Subrahmanya collected in this volume deal with politics.

Mr Subrahmanya's strong point is that he writes as an observer and not as a protagonist of this or that party or group which is the wont of several writers. Further he seeks to draw attention to the fundamentals of development. For example, he raises the question, "Why the literacy ratio in India is barely 30 per cent while many developing countries have succeeded in wiping out illiteracy altogether? ....why ..... has the size of the population below the poverty line actually grown over the decades....?"

The articles reflect the hopes and disappointments of the years. On May 1, 1977 Mr Subrahmanya, like many others, thought that "the victory of the Janata-CFD combine at the March 1977 Lok Sabha election is nothing short of a revolution through the ballot box" (p 31). A year later in August 1978 he was not so sure that the victory represented a revolution. "The party's record of 16 months is uninspiring. It cannot be said that the Janata Government has shown a sense of urgency in tackling the grave economic problems that bedevil the nation... The drift should stop..." (p 63). By October 1978 he came to realise what he earlier believed to be a ballot revolution to be a "false revolution" (p 67). Underlining his disappointment at the turn the events had taken, he wrote on October 15, 1978, "I say this with a tinge of sadness because, at the time the event occured, that is, when the ruling Congress party was voted out of power, at the Centre, I took a simplistic view of the transition by ballot. Without belittling the significance of the Indian voters' choice, I am inclined to say that it did not represent a conscious attempt on the part of the voters to dislodge the power elite from the position in which it was strongly entrenched." (p. 67)

This disenchantment was not a personal one but was general. Mr Subrahmanya, unlike many others, had the honesty to admit when and where he has gone wrong. However, the misunderstanding was not confined to the performance of the Janata Party alone. There was a failure to understand the strength of the Congress (I) led by the Mrs Indira Gandhi. In May 1979 the Congress (I) seemed to be an insignificant political factor (p 108). Within six months the author was writing on the possibility of Mrs Gandhi taking over power which she did in fact in January 1980.

It is interesting to speculate on what gives rise to such misunderstanding.

Subhash Chandra Sarker

Managing public sector

Principles and Practice of Public Enterprise Management

by Laxmi Narain

S. Chand and Co. Ltd., Ram Nagar, New Delhi-110 055; 1980; *Pages xi*+515; *Price Rs* 18.

The Indian public sector presents a variegated system, of which it is difficult to find a parallel in the non-communist countries of the world. The Indian public sector embraces a large number of organisations. This is also the case in some other countries. Where the Indian system differs is that it also embraces industrial organisations at different levels—Central and State. The importance of the public sector is given by the fact that it accounts for about a fifth of the net domestic product, nearly 40 per cent of the annual gross capital formation, a quarter of the net domestic savings, and about seven per cent of the employment in the country. How well the public sector is managed is thus of the utmost importance and a matter of concern for all citizens.

This book discusses management of public sector organisations at the Central level in India. The state-level public sector organisations are not covered by it. To the extent that the state-level organisations are modelled upon the Central-level organisations, this omission is not of any great significance. The volume confines its attention to the industrial undertakings. In 17 chapters the author discusses among other topics, the place and extent of the public sector in Indian economy, its rationale and objectives, nationalisation and compensation on nationalisation, the organisational pattern of public sector undertakings (public corporation, government company, departmental organisation and the like), the management pattern at the board level and at the unit level, measurement of efficiency, performance evaluation, pricing policies, industrial relations and public accountability. The discussion is factual and informative, in appropriate cases supported by necessary references. In the chapter on public relations and the consumer the author draws attention to the very poor institutional arrangement even in the public sector to protect the consumer.

The book eminently serves the interest of those for whom it is intended —*i.e.*, students, to facilitate whose use the book has been priced incredibly low at Rs 18 through a subsidy provided through the National Book Trust of India by the Government of India for the publication of the book.

MFA : Dilemma of EEC

International Trade in Textiles—the Policy of the European Community.

Michel Englert. Brussels, Bureau d'Informations Europeennes sprl (rue Hobbema 13); *February* 1981; *Pages* 194.

For all those who are interested in the Multi-Fibre Arrangement (MFA) negotiations a research organisation in

Brussels has published a detailed guide to the EEC's policies. Although it necessarily concentrates on the operation of the bilateral agreements concluded in 1977 in the framework of MFA-II, the 200-page work looks at the early preparations for the current MFA negotiations.

Its author, Michel Englert, neatly outlines the dilemma facing the EEC : it can reject demands from the developing exporting countries for increased access to the Community — but at the risk of a breakdown in the negotiations. Or it can accept these demands — and run the risk of a further decline in its textile industry.

Englert believes, however, that the two sides "will once more find a compromise." He feels the tendency on the part of European manufacturers to shift production to the developing countries may be drawing to an end : the development of artificial textiles and the growing recourse to increasingly advanced technology are changing the character of the textile industry, which is moving into the "heavy" industry category.

Englert points to two "particularly disquieting problems," to neither of which the EEC has a solution. The first is the slow restructuring of the European industry, the second the "astronomic growth" in imports from western industrialised countries, especially the United States.

He notes that at the same time Community policy is preventing low income countries from making full use of their export potential and points, as evidence of this, to fraudulent shipments, the increasing use by the EEC of the basket extractor mechanism and the difficulties it is experiencing in fixing quotas and meeting transfer requests.

The study includes a detailed account of (1) the Community's policy towards the Mediterranean and Lome countries; (2) the operation of the existing bilateral agreements; and (3) the GSP scheme for textiles. This shows that India was meant to be the principal GSP beneficiary, with potential duty free exports of nearly 25,000 tonnes, followed by Pakistan with just over 13,000 tonnes.

A useful feature of the study is an inventory of all the legal texts relating to the EEC's textile trade policy. The numerous tables include the 1981 breakdown, between the member states, of the quotas for each of the 8 "highly sensitive" products in Group I.

Malcolm Subhan

In Brief

Lectures on Company Law

by Shantilal Mohanlal Shah

in association with R. M. Kantawala, N. M. Tripathi Private Ltd, 164 *Samaldas Gandhi Marg, Bombay,* 400 002; 1981. *Pages xxxi,* 555, *cccxvi; Price Rs* 50

This is a revised version of the well-known book on company law, incorporating the Indian case laws till June 1980. Company law, as enacted in 1956, has undergone no fewer than eleven amendments—the last one to be effected in 1977. Another amendment by Parliament is expected. However, in our country it is not only the Acts of Parliament and legislatures that determine law, the verdicts of the courts of law also modify the laws to a substantial degree. This book, by incorporating the case laws, is intended to facilitate the understanding of the law. The text of the Act, as given at the end of the book, does not, however, contain the amendments of 1977 which are provided as Addenda at the beginning of the book. This is far from a convenient arrangement and the failure to print the text of the law properly in a book published in 1981 (four years after the amendment) is not easy to understand.

Need for coastal railway

IN an article in *Pigmy Economic Review*, published by Syndicate Bank, Dr N. K. Thingalaya, the editor of the journal, emphasises the importance of the construction of the Konkan railway on the west coast. He says the missing link is for a stretch of 867 miles from Apta near Bombay to Mangalore. The areas through which the Konkan railway is expected to traverse comprise only backward districts, except perhaps the Union Territory of Goa. The districts like Jaigadh, Ratnagiri. North Kanara and South Kanara are indeed backward districts.

Dr Thingalaya says further: "To make the dream of Konkan railway a reality, perhaps a different approach is necessary. The study of the west coast transport network sponsored by the Government of Maharashtra at the instance of the National Transport Committee and carried out by the Department of Economics, Bombay University last year has thrown a fund of data on the feasibility of railway system in this part of the country. It has been correctly pleaded in this report that instead of merely confining the analysis of cost-benefit in terms of financial returns, it would be worthwhile to examine the social benefit cost of this project. From the financial analyst's point of view, this project may require a huge investment and may not yield the necessary returns over a fairly long period of time. However, if we consider the social benefit which this project may confer upon the economy of this region, it can be perhaps said that this project would be of immense economic utility.

"A few attempts have been made in developing some pockets as industrial centres in four districts. Some activities for industrialisation have been initiated and a few large scale industries have already been established in these four districts—the chemical plants in Jaigadh district, aluminium industry in Ratnagiri district, caustic soda and paper mill in North Kanara district and the huge fertiliser complex in the joint sector in South Kanara. However for a speedier development of industrial activities in this part an efficient railway system would be most essential. Considering the potentialities of the region and its hinterland, there is an imperative need for providing a boost to the economic activities. In the case of this project, it is highly desirable that the Indian Railways must make a departure in their approach to investment on the new railway line. Since the railways under the budgetary provisions cannot afford to go in for new railway line, it is suggested that a new corporation "Konkan Railway Corporation" can be established by the Indian Railways. This corporation can be established as a public sector undertaking which can be provided with the technical personnel by the Indian Railways. This corporation can raise capital for investment as a commercial proposition from the open market. The public sector banks which have a stake in the development of the region which will be the immediate beneficiary can also be asked to provide the working capital needed for the railways. The lead banks which are functioning in this area are Bank of India, State Bank of India and Syndicate Bank. The corporation can also raise funds through debentures."

BOOKS RECEIVED

Economic Bulletin for Europe Vol 32 Recent changes in Europe's Trade, prepared by the Secretariat of the Economic Commission for Europe, Geneva, for obtainining book write to : United Nations, Sales Section, New York or Geneva, pages 98, price $US 9.00.

Quarterly Bulletin of Steel Statistics for Europe vol xxxi, No. 3, 1980, prepared by Economic Commission for Europe, for obtaining Book write to : United Nations, Sales Section, New York or Geneva, pages 66, price $US 6.00.

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25 years of Indo-German Chamber of Commerce

—A FEATURE

Greetings from Mr Karl Carstens

President of the Federal Republic of Germany

On the occasion of the 25th anniversary of the Indo-German Chamber of Commerce I should like to convey my most cordial congratulations.

During my official visit to India in the month of March this year my stay in Bombay has been one of the highlights. On this occasion I got to know the activities of the Indo-German Chamber of Commerce and I won the impression that this institution provides an essential contribution to Indo-German relations.

I am convinced that the Indo-German Chamber of Commerce with its record of successful activities for a quarter of a century will continue to foster and strengthen the economic cooperation between our two countries to the mutual benefit of our people.

Karl Carstens
President of the
Federal Republic of Germany

Message of greetings from
Mr Otto Wolff von Amerongen
President of the Association of German Chambers of Commerce and Industry

It gives me great pleasure to felicitate the Indo-German Chamber of Commerce on the occasion of its 25th Anniversary celebration on behalf of the German Chambers of Commerce & Industry, our German Chambers abroad and on my own personal behalf. I am happy that this Chamber has grown into a wide network—with its headquarters in Bombay and branches in Calcutta, Delhi, Madras and Bangalore.

I know of the significance and tradition of the Indo-German trade relations. I have come to know about it through the many discussions with members of the Indian government and through my visits to India. In the first 25 years since its inception, the Indo-German Chamber of Commerce has achieved commendable work in the area of Indo-German economic relations to the most extensive degree. Over and above the normal routine work of Chambers of Commerce abroad in an advisory capacity or as information centres it is effectively engaged in such activities as promoting licence agreements, preparing of market reports, market research and trade-fair promotion. Through its special programme of promoting medium-scale industry, the Indo-German Chamber of Commerce enable medium-sized German undertakings to find Indian collaborators. The Chamber has offered invaluable help in numerous cases, assisting in drafting collaboration agreements and successfully conducting the often difficult negotiations with government offices.

The work and significance of the Indo-German Chamber of Commerce was highlighted recently during the visit to India by the President of the Federal Republic of Germany, Mr. Karl Carstens, who gave the only public speech before the forum of the Chamber and on this occasion stressed the special importance of India in the area of German-Asian trade relations.

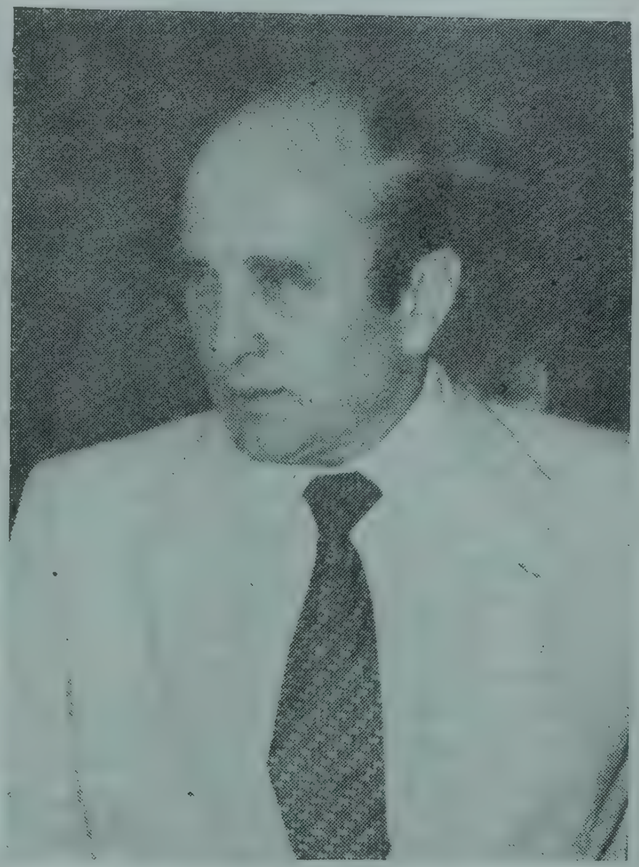
It is unfortunate that the economic development the world over prognoses a series of problems for the future, consequently casting uncertainty over the good relations between individual countries and markets. The work of the German Chambers abroad takes on added importance specially in difficult times. Despite the difficult situation of the world economic development, it is heartening to note the as yet unexplored possibilities in the spectrum of Indo-German economic relations. I am thinking particularly about the ever improving collaboration in the area of training and development. These are obvious spheres for contribution by the German Chambers of Industry and Commerce. In this connection, I would like to welcome the measures introduced by the Indian government in recent times towards the removal of administrative difficulties, resulting in marked improvements.

The future work of the Indo-German Chamber of Commerce is woven into the fabric of possibilities as it exists now. May the Chamber be successful in the coming years through its myriad activities in all the branches of economy, commerce and technology in contributing to the strengthened co-operation between the tradition and culture-rich sub-continent of India and the Federal Republic of Germany, thereby consolidating and continuing a trend already established.

O. Wolff von Amerongen
President
Association of German
Chambers of Commerce & Industry

Dr Otto Graf Lambsdorff

Minister for Economic Affairs
Federal Republic of Germany
who will be the Chief Guest
at the Silver jubilee celebrations
of Indo-German Chamber
of Commerce in Bombay
on August 23, 1981.



Forthcoming German trade fairs for Indian exporters

GERMANY is one of the world's leading organisers of trade fairs. Participation in these fairs, or even a visit to the same, offers the best opportunity of making new contacts and keeping oneself informed of the latest developments on the market for various products. The Indo-German Chamber of Commerce in India represents various German trade fairs in Berlin, Cologne, Duesseldorf, Hannover and Munich. Of these, the following trade fairs, to be held in Germany during October, November and December 1981, are specially suited to Indian manufacturers and exporters.

ANUGA, World Food Market, Cologne (10 to 15 October 1981) : At this food fair, the variety of items displayed include beverages, milk and dairy products, sweets, frozen foods, non-foods and all general foodstuffs and provisions. At the last ANUGA, which was held in September 1979, 4,140 exhibitors from 79 countries took part. There were 15 exhibitors from India, displaying items like frozen and canned fish specialities, pickles, canned mango products, spices, cashew nuts, coffee and tea.

A + A, Industrial Safety and Occupational Health — Congress and International Trade Fair, Duesseldorf (6 to 9 October 1981) : This exhibition will present production techniques with special emphasis on safety, methods of humanising working environments, accident prevention techniques, protective clothing and equipment, new trends in occupational medicine, hygiene and industrial psychology. At the last meet in November 1979, A + A had a participation of 275 exhibitors and 25,650 visitors from 15 countries and 25 countries respectively.

IGEDO, International Fashion Trade Fair, Duesseldorf (25 to 28 October 1980) : This fair, a window on world fashions for ladies' and children's wear, is held four times a year — in March, April, September and in October. Six Indian firms participated at the meet in October last year, displaying dresses, skirts, trousers, shirt and trouser combinations, blouses, jackets, shirts, ladies' and children's suits, quilted jackets, vests, scarves of cotton, viscose and crepe, sandals and leather articles. In all, over 1,800 firms participated in IGEDO during this meet.

MEDICA, International Congress and Trade Fair — Diagnostica — Therapeutica — Technica, Duesseldorf (18 to 21 November 1981) : Electromedical equipment, laboratory equipment and materials are among the main items exhibited at this fair. Five hundred and thirty-three exhibitors from 14 countries participated at the last MEDICA held in November 1980.

SYSTEMS, Computer Systems and their application — International Congress and Trade Fair, Munich (19 to 23 October 1981) : This fair is specially suited to Indian exporters of software. The software products exhibited include basic software, system-oriented software, multi-purpose software and the various applications of software in general. At the last meet in September 1979, there were 454 exhibitors at this fair.

Productronica 81, 4th International Trade Fair for Manufacture in Electronics with Conferences, Munich (10 to 14 November 1981) : The main groups of exhibits cover production of electronic components and assemblies, equipment production and general manufacturing techniques, instruments for measuring, testing and inspection. The Productronica held in November 1979 had 783 exhibitors from 19 countries and 31,200 trade visitors from 51 nations.

Tickets and detailed information regarding all these fairs can be obtained from all the offices of the Indo-German Chamber of Commerce.

Growing Indo-German economic ties

By RADHESYAM PUROHIT

TRADE is better than aid — this slogan raised by the Indian policy-makers only a couple of years ago has already paid attractive dividends, Indo-German economic relations, marked by a stagnation till 1975, picked up quickly the opportunities open to it and entered into a new phase of expansion and growth. Both ways exchange of goods and services showed an all-time record of DM 2.5 billion last year (according to the latest exchange rate 1 DM = Rs 3.59) which corresponds to an increase of 87 per cent over Indo-German trade concluded in 1975. This achievement is partly due to the active support and help of the Indo-German Chamber of Commerce in Bombay, which is now celebrating its 25th anniversary.

The Federal Republic of Germany became an independent and sovereign state on May 5, 1955. India was one of the first countries to recognise the new German republic. Eight months later, on January 20, 1956, the Indo-German Chamber of Commerce was founded in Bombay. For the Federal Republic of Germany, the chamber was first of its kind in Asia. One year after the establishment of the Indo-German Chamber of Commerce in Bombay, it registered 268 members. Today the chamber with its five branches has on its roll more than 2,000 members in India.

In the initial phase of the West German Republic, the then Chancellor, Dr Konrad Adenauer, was greatly in need of dependable political friends in the world. Jawaharlal Nehru, India's first Prime Minister, was also in search of dependable economic friends, who could help establish basic and heavy industries in new India. As Mr Nehru commanded a leading voice on the international political platform, Dr Adenauer placed much hope in Mr Nehru's sympathy for the "German problem". Nehru, however, was clear in his mind that the "German problem" was not to be solved by unilateral and arbitrary politics of Dr Adenauer, which ignored the post-war reality and the existence of the second German state, the GDR. But he also did not recognise the GDR in order to avoid jeopardising Dr Adenauer's political concept of the "solution" of the German problem. It took fourteen years for the Federal Republic of Germany to realise what Mr Nehru insisted and for what he was criticised by Dr Adeneuer, that the real solution to peace in Europe was to accept the post-war reality. With Willy Brandt becoming Chancellor in 1969, Bonn initiated the so-called "Ostpolitik", which brought a new era of political peace in Europe.

On the economic and industrial front West Germany started the world with its "Economic Miracle" in the late fifties. Indo-German economic co-operation simultaneously also recorded a high degree of priority in both countries. As in those days India needed heavy investment goods and her capacity to export was limited, the bilateral trade was naturally unfavourable to India's balance of payments. The deficit remained to the amount of DM 900 to DM 750 million annually till mid-sixties. Of course, India was striving hard to export more and thereby narrow the gap of the deficit in trade. But the West German market was not only sophisticated but also extremely competitive. India also felt this competition even in its traditional exports to West Germany from a number of other developing countries.

Meanwhile the open exchange of ideas and views between Indians and Germans forced the exporters to improve their goods through the use of better technology to meet the required standard in the German market. Here the Indo-German Chamber of Commerce have rendered creditable services to India. During the last ten years, various efforts were made to supply authoritative information regarding the West German market to Indian businessmen. Also, it was underlined that a country like India should not depend for her industrial development on official capital aid from abroad. The country must stand on its own feet to export more and redress the adverse balance of trade. India's neighbouring countries — Hongkong, Singapore and South Korea—showed that even tiny states performed much better than the giant India.

That has obviously spurred India to greater export efforts than in the previous years. India has now earned the reputation of being among the first 10 industrial nations in the world. In West Germany, the traditional image of India -- a country full of snakes, fakirs, poor and hungry people and above all maharajas — is slowly fading away. The economic and industrial potential of India is being rediscovered by the German business world. Already the private German investment, which was stagnant for years has recorded an increase of 7.4 per cent in 1980 to DM 191.9 million. Also India has private investments in West Germany to the tune of about DM 5 million.

One of the important factors, which has contributed to the larger demand for Indian goods, is India's continuous participation in West German trade fairs. Now it is an essential part of India's export policy to participate in all important trade fairs abroad. In West Germany, India is taking part in 15 major trade fairs round the year, covering major industrial and consumer goods. Such participation not only convinces the buyer on the spot about the quality and standard of the goods, but also contributes to the image of the seller. Here again the Indo-German Chamber of Commerce have helped in organising Indian participation in the German trade fairs.

Among the "traditional" export items, cotton garments, carpets, leather goods, tea, precious stones, oil cakes, garments of silk and rayon and synthetic fabrics have expanded their earnings substantially this year. Items like leather, cotton fabrics, jute and copper alloys and goods failed to keep their record of last year.

Though the overall achievements of Indo-German trade seem to be encouraging, much is still to be done. Keeping in mind the fact that even Indian exports worth DM 1,384 million to West Germany in 1980 do not even make halt per cent of the total West German imports the vastness of the existing possibilities for expanding Indian exports would be clear. For Indian exports West Germany ranks fifth after the USA, Japan, the Soviet Union and Great Britain. In West German imports from East Asian countries, India ranks 8th and third as importer of German goods.

Mr Purohit is Bonn Correspondent of Commerce.

25 years of Indo-German Chamber of Commerce

THE history of Indo-German relations is marked more by cultural than by economic links. Students of history are aware how Goethe praised the Sanskrit play *Shakuntala*, how Schopenhauer admired the *Upanishads*, how Max Mueller was called Moksha Moola and Paul Deussen called Devasena by their Indian admirers in loving appreciation of the pioneering studies made by these German Indologists.

While such 'manna' of mutual admiration may be nourishing enough in the spheres of literature and culture, it is unfortunately not solid enough to form the basis for profitable trade and commerce between our two countries. The base for a sound economic relation between India and Germany was laid much later, and got real momentum only after independence of India. However, the first economic links date back as far as to the 16th century.

Between the 16th and the 18th centuries, a number of German companies were established with the express purpose of trading with India and other East Asian countries, and every one of them was short-lived and had to be wound up. It was only in the 19th century that the German initiative in reviving the trade with India proved moderately fruitful. The first German trade representation was set up in Bombay and Calcutta in 1844, with the opening of consular offices by the Hanseatic and Free City of Hamburg. The consulates of Prussia followed in 1854 in both the cities, and the consulate of Hannover in Calcutta in 1855. The trade volume increased gradually, and a regular shipping line was started a few years later between Hamburg and India. In 1867 the German firm Siemens laid the telegraph line between Calcutta and London. The first Indian branch of a German bank came to Calcutta in 1896. At the turn of the century, the German imports from India were about 215 million marks, while the exports to India were about 60 million marks.

Trade statistics in terms of rupees or marks over several decades are rendered invalid by the changes in currency values, but it may come as a surprise to many that the balance of trade was almost always in favour of India until India gained Independence and launched its ambitious plans for economic development. The imports of iron and steel, machinery, electrical equipment, chemicals, etc necessitated by the development plans led to a continuing trade deficit in Indo-German trade, which persists even today, however, to a lesser extent than a couple of years ago.

As already mentioned economic relations between India and Germany gained momentum only after independence of India. Today, we look back on three decades of progress in imports, exports and industrial collaboration supported by the activities of the Indo-German Chamber of Commerce during the last 25 years.

Indo-German trade 1956-1981

A survey of the development of Indo-German trade since 1956 shows a highly irregular graph. In the course of the last 25 years, there have been times, when the growth rate of India's exports to Germany plunged to minus 23 per cent (1967), others, when it rose to an unprecedented level of plus 55 per cent

Table I: Indo-German trade: 1956-1980

Year	Exports to Germany (DM million)	Growth rate (%)	Imports from Germany (DM million)	Growth rate (%)	Trade gap (DM million)
1956	189.2	n.a.	819.0	+38.9	629.8
1957	252.2	+33.3	1,126.4	+37.5	874.2
1958	191.6	—24.0	1,173.4	+ 4.2	981.8
1959	184.5	— 3.7	936.4	—20.2	751.9
1960	184.5	Nil	834.1	—10.9	649.6
1961	222.9	+20.8	780.0	— 6.5	557.1
1962	255.4	+14.6	730.0	— 6.4	474.6
1963	253.7	— 0.7	723.1	— 0.9	469.4
1964	271.9	+ 7.2	776.8	+ 7.4	504.9
1965	243.9	—10.3	1,049.3	+35.1	805.4
1966	239.2	— 1.9	951.2	— 9.3	712.0
1967	184.0	—23.1	795.7	—16.3	611.7
1968	215.3	+17.0	574.5	—27.8	359.2
1969	236.9	+10.0	498.5	—13.2	261.6
1970	260.6	+10.0	571.2	+14.6	310.6
1971	257.1	— 1.3	645.3	+12.9	388.2
1972	285.4	+11.0	738.9	+14.5	453.5
1973	339.7	+19.0	689.4	— 6.7	349.7
1974	418.4	+23.2	894.7	+29.8	476.3
1975	482.9	+15.4	862.6	— 3.6	379.7
1976	750.1	+55.3	922.1	+ 6.7	172.0
1977	786.3	+ 4.8	1,140.7	+23.7	354.4
1978	764.6	— 2.8	1,271.2	+11.4	506.6
1979	1,001.8	+31.0	1,285.0	+ 1.1	283.2
1980	1,134.7	+13.2	1,372.2	+ 6.8	237.5

Table 2: Indo-German trade: by major commodity groups: 1956

Commodity group	Exports to Germany (in DM million)	Imports from Germany (in DM million)
Foodstuffs	47.0	2.9
Fine foods and stimulants	0.4	1.9
Raw materials (excl. foodstuffs and fuels)	88.2	18.2
Mineral fuels, lubricants and related products	0.1	0.4
Animal and vegetable oils and fats	12.8	Nil
Chemical products	2.2	91.6
Processed goods	36.9	181.6
Machinery and vehicles	0.2	483.4
Other finished goods	0.7	38.0
Other goods	0.9	0.9
Total	189.2	819.0

* Based on the SITC classification of the UNO.

Table 3: Indo-Germantrade: by major commodity groups: 1980

Commodity group	Exports to Germany (in DM million)	Imports from Germany (in DM million)
Living animals	0.1	Nil
Foodstuffs of animal origin	3.0	46.9
Foodstuffs of plant origin	61.3	1.9
Fine foods and stimulants	51.9	1.5
Raw materials	58.4	4.4
Semi-finished products	19.3	72.9
Primary products	442.7	513.2
Finished products	489.4	723.4
Returned goods and replacements	8.7	8.0
Total	1,134.8	1,372.2

SOURCE: Aussenhandel nach Laendern and Warengruppen (Spezial-handel), Reihe 3 of the Statistisches Bundesamt Wiesbaden.

Table 4: German private investment in India: 1956-1980

Year	Investment	Growth rate (%)
upto 31-12-1956	28 million Rs.*	+12.0
upto 31-12-1960	68 million Rs.*	+25.9
upto 31-12-1965	125.9 million DM	n.a.
upto 31-12-1966	135.7 million DM	+ 7.8
upto 31-12-1967	153.9 million DM	+13.4
upto 31-12-1968	160.3 million DM	+ 4.2
upto 31-12-1969	167.8 million DM	+ 4.7
pto 31-12-1970	170.0 million DM	+ 1.3
pto 31-12-1971	181.3 million DM	+ 6.6
pto 31-12-1972	180.3 million DM	— 0.5
pto 31-12-1973	170.8 million DM	— 5.3
pto 31-12-1974	174.3 million DM	+ 2.0
pto 31-12-1975	178.0 million DM	+ 2.1
pto 31-12-1976	178.5 million DM	+ 0.2
pto 31-12-1977	174.6 million DM	— 2.2
pto 31-12-1978	179.1 million DM	+ 2.6
pto 31-12-1979	178.7 million DM	— 0.2
pto 31-12-1980	191.9 million DM	+ 7.4

* As per Indian statistics; the figures for the following year as per German statistics.

(1976). Again, between 1956 and 1966, German exports to India reached a peak in 1965 with a growth rate of 35 per cent and a total value of DM 1.1 billion. Another sudden spurt was recorded in 1974 and again in 1977, when growth rates of plus 29.8 per cent and plus 23.7 per cent were achieved. In spite of these erratic movements to be noticed during some years, the overall development during the last 25 years is marked by a steady growth both in imports as well as exports.

As compared to 1956, Indian exports to Germany were about five times as much in 1980, while German exports to India were higher by 67.6 per cent. In 1978, for the first time, the total value of Indo-German trade exceeded the two billion mark and reached DM 2.5 billion as per the end of 1980. Indo-German trade continues to rise also in 1981.

Along with the development in the volume of Indo-German trade, there has also been a gradual metamorphosis in its composition *i.e.* one can perceive India's gradual development as an exporter of finished goods to Germany. Whereas in 1956, raw materials (excluding foodstuffs and fuels) accounted for 46.6 per cent of India's total exports to Germany, in 1980, their share fell to 5.2 per cent. In fact, the share of finished goods, whose volume accounted for barely DM 0.9 million in 1956 in a total of DM 189.2 million, rose to 43 per cent or DM 489.4 million in 1980. German exports to India, on the other hand, still consist mainly of capital goods like machinery, vehicles, electrical goods, chemical and pharmaceutical products as before.

Germany continues to be one of India's leading suppliers, ranking fifth in 1979-80 (1.4-31.3).

Also among India's major buyers, Germany held the fifth position in 1979-80. Among Germany's main trading partners, India ranked third among Germany's East Asian buyers in 1980 and eighth among the suppliers of this region.

Indo-German industrial collaboration

The modern history of Indo-German collaboration dates back to the early fifties with such outstanding collaborations like the Daimler-Benz joint venture with TELCO and the Bosch factory in Bangalore under the name 'MICO'. It is a remarkable fact that right from the beginning, not only big German companies came to India, but also medium-sized and smaller German undertakings — a tendency which continues till today. In fact, the first Indo-German joint venture after Independence was the trading house of Protos Engineering which was initiated by Mr Heller, who later on became the founder-president of the Indo-German Chamber of Commerce.

The formation of new Indo-German joint ventures gained momentum during

WHO'S WHO IN INDO-GERMAN CHAMBER OF COMMERCE

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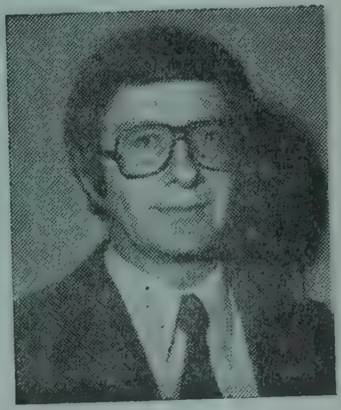
President

Mr AKBAR HYDARI
Vice-President

Dr G. KRUEGER
Executive Director



the mid-fifties when also the Indo-German Chamber of Commerce was formed. We observe a stagnation during the early seventies and of late, once again, a revival of German investment in India.

Since 1956, German private investment in India showed a marked positive trend until 1971. Thereafter, it stagnated and even declined, varying between DM 170.8 million and DM 180.3 million, until in 1980, a firm positive trend was secured with a rise of 7.4 per cent. With that, India ranked sixth with respect to German investment in Asia, preceded by countries like Israel, Iran, Japan, Singapore and Hongkong.

In India, figures on foreign collaboration normally relate to the number of collaborations sanctioned by the Indian Government, irrespective of whether they are joint ventures or technical collaborations. Germany belongs to the group of the 'big three' — the others being the UK and the USA — who have been India's main suppliers of technology. As per latest statistics of the Indo-German Chamber of Commerce, there are 511 Indo-German collaborations existing, out of which 121 are joint ventures (see table 4).

At the end of 1980, Indian investment in Germany amounted to DM 22.7 million, invested primarily in the fields of banking, consultancy and engineering. Though as compared to the previous year, this was lower by 3 per cent, Indi continued to maintain its position as th sixth largest Asian country investing i Germany. As in the previous year, it wa preceded by countries like Japan, Iran Kuwait, Hongkong and South Korea.

Table 5: Number of Indo-foreign collaborations sanctioned by the Indian Government (with respect to 12 main countries)

Country	Up to 1960	Up to 1970	Up to 1980
UK	223	849	1,455
USA	81	579	1,212
Germany*	79 (30)	499 (156)	1,108 (230)
Japan	51	281	536
Switzerland	16	152	366
France	14	125	295
Italy	21	89	205
GDR	6	72	117
Sweden	15	53	115
Netherlands	7	50	98
Czechoslovakia	6	38	71
Denmark	8	36	64

* Figures in brackets indicate the number of joint ventures i.e. those with financial participation

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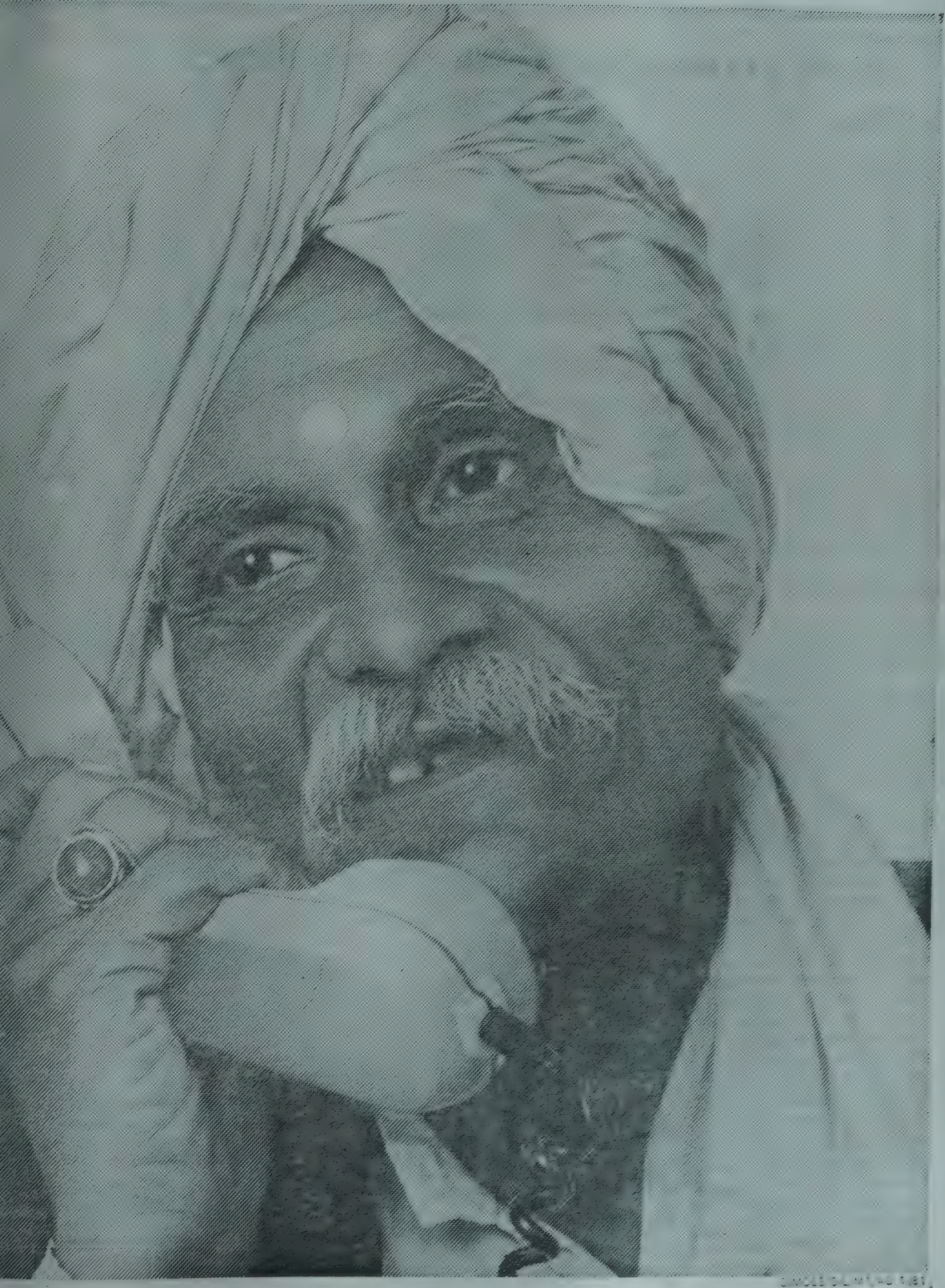

INDO-GERMAN CHAMBER OF COMMERCE

PRESIDENTS

1956-1981

1956-57	Mr F. K. Heller	1969-70	Dr Ing. B. P. Godrej
1957-58	Mr Chinubhai Kilachand	1970-71	Mr G. Crasemann
1958-59	Mr F. K. Heller	1971-72	Mr B. M. Ghia
1959-60	Mr A. B. Parakh	1972-73	Mr D. Laengenfelder
1960-61	Mr G. Wilhelm	1973-74	Mr A. N. Kilachand
1961-62	Mr A. B. Parakh	1974-75	Mr H. D. Grabenhorst
1962-63	Mr W. Baelz	1975-76	Mr P. K. Sanyal
1963-64	Mr B. C. Patel, D. B. E.	1976-77	Mr H. G. Salge
1964-65	Mr H. D. Grabenhorst	1977-78	Dr F. A. Mehta
1965-66	Mr V. C. Setalvad	1978-79	Mr G. Wallbrecht
1966-67	Mr G. Crasemann	1979-80	Mr F. A. A. Jasdanwalla
1967-68	Mr A. N. Kilachand	1980-81	Dr H. Langer
1968-69	Dr R. Storkebaum		

511 Indo-German collaboration agreements

ACCORDING to the latest statistics of the Indo-German Chamber of Commerce, there are at present 511 Indo-German collaboration agreements in operation thereof, 121 with financial participation.

Of the total number of collaboration agreements, 56 per cent are involved in the machinery sector and 10.5 per cent in chemicals and pharmaceuticals. In the latter case, 40 per cent are joint ventures; with respect to machinery, this percentage is lower at 33 per cent. Again, the percentage of firms with German share capital exceeding 40 per cent (the maximum limit prescribed by FERA) is higher in the case of chemicals and pharmaceuticals : 44 per cent as against 32 per cent in the machinery sector. In all, 17 per cent of all Indo-German joint ventures have German financial participation of more than 40 per cent.

A regionwise analysis shows a concentration in the Bombay-Poona region, where 36 per cent of all Indo-German collaborations are located. Calcutta comes next with 14 per cent, followed by New Delhi with 11.7 per cent and Bangalore and Madras with 6.7 per cent each.

With respect to joint ventures, from the 121 in operation, 41 per cent are located in the Bombay-Poona region; 13 per cent in New Delhi, 10.7 per cent in Calcutta, 7.4 per cent in Bangalore and 6.6 per cent in Madras. Altogether, these regions account for 80 per cent of all Indo-German joint ventures. In the Bombay-Poona region, there are nine joint ventures with German share capital exceeding 40 per cent, in Calcutta 5, in New Delhi and in Bangalore 3 each and in Madras 1.

A branchwise split-up reveals that in the Bombay-Poona region, the majority of collaborations are concentrated in the chemicals and pharmaceuticals sector, in New Delhi in the vehicles and ancillaries sector, general machinery in Calcutta, and electrical machinery and machine tools in Bangalore. In the case of Madras, however, no such concentration is obvious.

Over 58 per cent of all existing Indo-German joint ventures started production during the sixties (1960-1969) thereof, 11 in 1963 alone. Of the balance, 15 per cent came into existence during the 1950s, 19.8 per cent during the seventies and the rest during 1980 and 1981. The branchwise distribution of new collaborations during the 30-year period (1950-1980) is given below :

	1950-59	1960-69	1970-79	1980
	(% share in the total number of new joint ventures)			
Chemicals and pharmaceuticals	25	14.5	9.5	—
Vehicles and ancillaries	25	8	9.5	25
Machinery	18	55	52.4	75

In 1981, three new joint ventures have started production thereof, two i the machinery sector and one for instruments and hand tools.

A directory of Indo-German collaborations, giving detailed and up-to-dat information on all Indo-German collab ration agreements can be obtained from all offices of the Indo-German Chambe of Commerce by September 1981

Activities of the Indo-German Chamber of Commerce

WITH a record of outstanding performance behind it, the Indo-German Chamber of Commerce, in its Silver Jubilee Year, continues to pursue the objectives set out at the start : promoting Indo-German economic co-operation.

Concentrating on two lines of activity — Indo-German industrial collaboration and Indo-German trade — the Chamber offers the following services :

The Chamber acts as a media for the setting up of Indo-German industrial collaborations by facilitating the establishment of contacts and giving advice and assistance in the drafting of collaboration agreements and in negotiations with the Government.

Through its various journals, market reports and, above all, through its bulletin *Indo-German Economy/Deutsch-Indische Wirtschaft* which has a circulation of more than 4,000, the Chamber makes available latest news and useful information regarding economic situations in the two countries, their mutual trade relations, customs duties and the Generalised System of Preferences, trade enquiries, the market for specific products in Germany and how best one can set up business in Germany.

The Chamber represents Germany's leading trade fairs : Berlin, Cologne, Duesseldorf, Hannover and Munich. Bookings, fair passes, trade fair catalogues, arrangements for stands and personnel — all this is undertaken by the Chamber.

The Chamber offers its own arbitration. The Chamber's arbitration clause which is included in a number of collaboration agreements and trading contracts, reads :

> “Any dispute or difference or claim arising out of or in relation to this contract, including the construction, validity, performance or breach thereof, shall be referred to the Indo-German Chamber of Commerce, Bombay, for settlement under the Arbitration Rules then in force. The Award of the Arbitration Court of the Chamber shall be final and binding on the parties hereto.”

Legal assistance is thus offered by the Chamber for the amicable settlement of trade disputes, claim cases and disputes arising out of collaboration agreements.

The Chamber issues letters of recommendation necessary for obtaining a visa for Germany and certificates of origin.

Lastly, the Chamber maintains a library, provides translating facilities and now and again organises seminars and discussions on issues like industrial and technical collaborations, marketing and export promotion.

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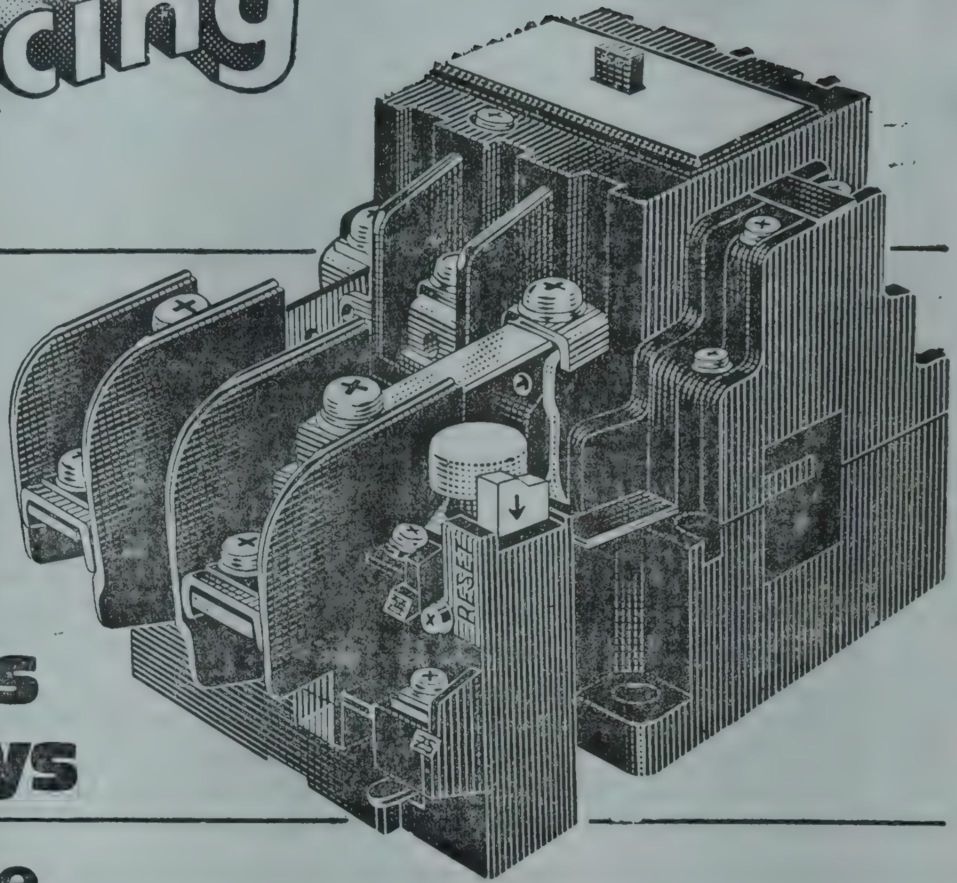

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STATISTICS

Share of India in West Germany's exports and imports (Per cent)

Year	Exports	Imports
1973	0.4	0.2
1974	0.4	0.2
1975	0.4	0.3
1976	0.4	0.3
1977	0.4	0.3
1978	0.5	0.3
1979	0.4	0.3

SOURCE: Derived from **Direction of Trade Yearbook 1980**, International Monetary Fund.

Share of West Germany in India's exports and imports: 1973-79 (Per cent)

Year	Exports	Imports
1973	3.4	7.5
1974	3.1	6.7
1975	3.0	7.3
1976	3.8	6.2
1977	4.5	8.7
1978	4.8*	7.3*
1979	5.8*	6.6*

Note: * Based on annual data derived from partner country.

SOURCE: Derived from **Direction of Trade Yearbook 1980**, International Monetary Fund.

Indirect Indo-German trade 1980 (in DM 1,000)

	Indian goods to Germany	German goods to India
Trade via third countries (total)	164,131	17,153
Out of which :		
Switzerland	46,106	19,571
UK	38,488	31,759
Iran	29,227	30
Netherlands	24,302	5,505
Belgium-Luxembourg	6,188	2,969
Italy	3,637	391
Denmark	3,439	497
Sweden	3,439	563
France	3,032	4,864
Hongkong	1,965	138
United Arab Emirates	905	78
Afghanistan	778	—
USA	691	2,054
Austria	671	730
Canada	318	9
Bulgaria	149	—
Israel	130	3
Republic of Ireland	125	7
Malaysia	85	—
Saudi Arabia	84	30
Norway	75	148
Peoples' Republic of China	68	—
Spain	64	65
Romania	47	—
Singapore	23	492
Australia	22	14
Pakistan	16	—
Czechoslovakia	15	58
Kuwait	11	—
Hungary	10	69
Panama	6	—
Japan	6	60
Taiwan	5	—
Colombia	2	—
Syria	1	—
Thailand	1	—
Greece	—	13
Finland	—	30
USSR	—	627
Algeria	—	145
Egypt	—	44
Liberia	—	79
Cyprus	—	17
North Yemen	—	28
Nepal	—	39
Indonesia	—	3
Philippines	—	22
South Korea	—	2

SOURCE: Indo-German Economy, June 1981 by Indo-German Chamber of Commerce.

India's trade with West Germany

(Rs crores)

Year	India's exports	India's imports	India's trade balance
1951-52	9.4	28.9	—19.5
1952-53	12.5	24.0	—11.5
1953-54	11.7	30.9	—19.2
1954-55	15.2	40.7	—25.5
1955-56	14.9	60.3	—45.4
1956-57	15.0	90.0	—75.0
1957-58	15.5	124.1	—108.6
1958-59	15.2	94.5	—79.3
1959-60	21.0	116.5	—95.5
1960-61	19.9	122.5	—102.6
1961-62	22.6	124.9	—102.3
1962-63	18.7	98.7	—80.0
1963-64	20.2	90.5	—70.3
1964-65	17.7	109.3	—91.6
1965-66	18.2	136.9	—118.7
1966-67	26.1	161.4	—135.3
1967-68	22.3	143.9	—121.6
1968-69	26.5	120.1	—93.6
1969-70	29.9	84.4	—54.5
1970-71	32.3	107.5	—75.2
1971-72	37.1	127.0	—89.9
1972-73	62.3	172.6	—110.3
1973-74	86.8	205.8	—119.0
1974-75	106.2	316.4	—210.2
1975-76	117.9	370.0	—252.1
1976-77	229.6	316.8	—87.2
1977-78	244.0	554.8	—310.8
1978-79	273.4	629.6	—356.2
1979-80	365.3	644.5	—279.2

Indian exports to West Germany 1980

Commodity	DM Million	Rs Crores	Per cent in total Indian Exports to Germany
Cotton and cotton goods	334.8	121.6	29.5
Wool and Animal Hair and articles thereof mainly carpets	206.1	74.8	18.2
Leather and Leather goods	137.3	49.8	12.1
Precious, Semi-precious stones, and Pearls	44.7	16.2	3.9
Tea	43.8	15.9	3.9
Others	368.1	133.6	32.4
Total	1,134.8	411.9	100.00

SOURCE: **Indo-German Economy—June 1981, Indo-German Chamber of Commerce.**

Indian imports from West Germany 1980

Commodity	DM Million	Rs crores	Per cent in total Indian imports from Germany
Machinery	426.8	154.9	31.1
Chemical and pharmaceutical products	243.0	88.2	17.7
Iron & steel sheets and plates	187.6	68.1	13.7
Electrotechnical goods	93.8	34.1	6.8
Vehicles	52.2	18.9	3.8
Others	368.8	133.9	26.9
Total	1,372.2	498.1	100.0

SOURCE: **Indo-German Economy, June 1981—Indo-German Chamber of Commerce**

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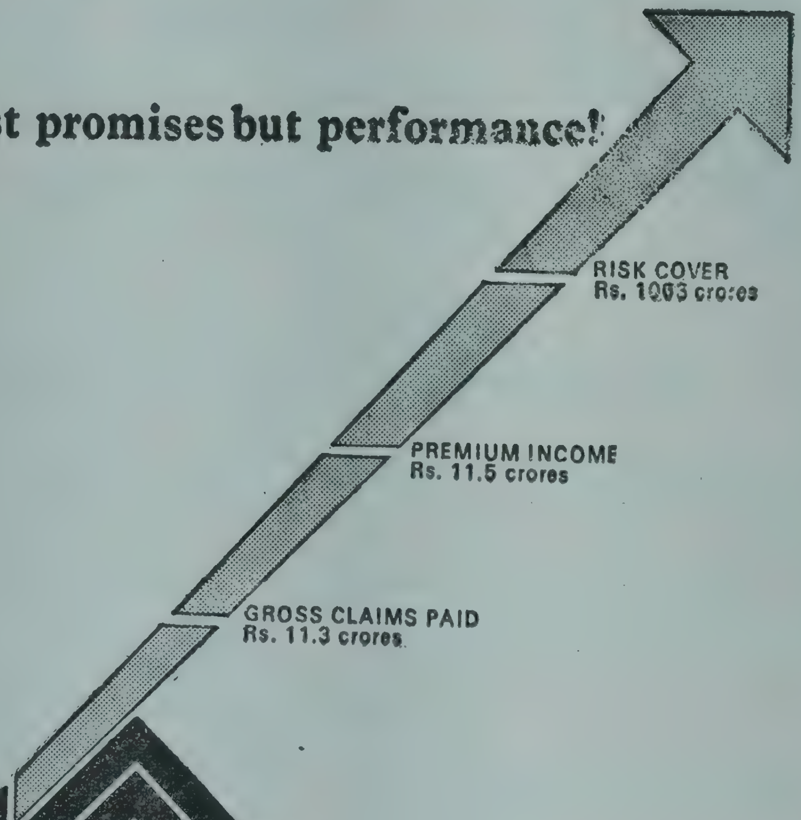

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West Germany's trends in foreign trade: 1950 to 1979

(US$ million)

Year	Exports	Imports	Trade balance
1950	1,987	2,701	—714
1955	6,123	5,827	296
1960	11,416	10,172	1,244
1965	17,913	17,612	301
1966	20,157	18,168	1,989
1967	21,761	17,546	4,410
1968	24,888	20,295	4,593
1969	28,852	24,876	3,976
1970	34,228	29,947	4,281
1971	39,062	34,478	4,686
1972	46,731	40,374	6,357
1973	67,563	54,891	12,672
1974	89,368	69,661	19,707
1975	90,176	74,930	15,246
1976	1,02,162	88,421	13,741
1977	1,18,091	1,01,475	16,616
1978	1,42,453	1,21,754	20,699
1979	1,71,887	1,59,711	12,176

SOURCE: International Monetary Fund, **Direction of Trade Yearbook 1980.**

West Germany's direction of foreign trade: 1979

Country	Exports			Imports		
	Millions of US$	Rs crores	Per cent to total	Millions of US$	Rs crores	Per cent to total
France	21,847	17,762	12.7	18,124	14,735	11.4
Netherlands	17,098	13,901	10.0	19,595	15,931	12.3
Belgium	14,610	11,878	8.5	12,785	10,394	8.0
Italy	13,408	10,901	7.8	14,092	11,457	8.8
USA	11,332	9,213	6.6	11,081	9,009	6.9
Austria	9,001	7,318	5.2	4,595	3,736	2.9
UK	11,486	9,338	6.7	9,427	7,664	5.9
Switzerland	8,963	7,287	5.2	5,810	4,724	3.6
Sweden	4,985	4,053	2.9	3,363	2,734	2.1
USSR	3,619	2,942	2.1	4,061	3,302	2.5
Denmark	3,735	3,037	2.2	2,538	2,063	1.6
Iran	1,285	1,045	0.8	2,320	1,886	1.5
Spain	2,539	2,064	1.5	2,142	1,742	1.3
Yugoslavia	3,169	2,576	1.8	1,203	978	0.8
India	702	571	0.4	547	445	0.3
Others	44,099	35,853	25.7	48,013	39,035	30.1
Total	1,71,878	1,39,737	100.0	1,59,696	1,29,834	100.0

SOURCE: Derived from **Direction of Trade Yearbook 1980,** International Monetary Fund.

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INDIA AND IMF

Will loan terms be stiff?

From OUR SPECIAL CORRESPONDENT

NEW DELHI

THE Union Finance Minister, Mr R. Venkataraman, has once again assured the country that, in borrowing Rs 5,000 crores from the International Monetary Fund (IMF) (SDR 5 billion or about $ 5.65 billion), India will not accept from the IMF any term "derogatory" to the honour or interests of the country. As if to further reinforce the statement Mr Venkataraman at a tele-press conference in New Delhi on August 13 said that except for India and the IMF nobody knew the terms which were being discussed. In any case the agreement would be a "public document" once the negotiations were over and an agreement reached.

The past is not forgotten easily and at the tele-conference Mr Venkataraman was asked a pointed question whether the IMF had proposed devaluation of the rupee as a dondition to the loan. It was the IMF that almost forced India to devalue the rupee in 1966, soon after Mrs Indira Gandhi had assumed office as the Prime Minister for the first time, and obviously in referring to "derogatory terms" Mr Venkataraman had this in mind.

The news that India was negotiating a loan with the IMF had been in the air for some time. The first figure mentioned was Rs 4,000 crores until Mr Venkataraman himself, in an interview to All India Radio on August 11, disclosed that the loan sought was for Rs 5,000 crores. Earlier on official team led by Mr R. N. Malhotra, Finance Secretary, had held talks in London and Washington with the IMF. The Finance Minister in the marxist West Bengal Government Dr Ashok Mitra, was the first to react violently to the news and expressed the fears that the IMF would impose very stiff terms for the loan and the suggestion was that devaluation may be one of them. A group of economists, some of them left of the centre, rallied round this point of veiw at a two-day meeting in Calcutta and said that the IMF advanced loans in foreign exchange only at a high price. It had been found earlier, they said, that borrowing countries had to lose much of their economic freedom and were forced to re-shape their economic policies in accordance with the conditions laid down by the IMF. What news correspondents at the tele-press conference in New Delhi had at the back of their mind was this view of the group of 23 economists, a view which Mr Venkataraman sought to dispel. He had earlier termed as a mere "scare" speculations that the International Monetary Fund would impose very stiff conditions on India for the massive loan she is seeking. To say that the IMF would clamp such conditions and India would have to accept all of them, he said was merely "to create a scarce, where nothing exists". That will not, however, satisfy the critics until the agreement terms are made public. One caustic comment on Mr Venkataraman's promise to make public the details of the agreement was : What is the use of knowing a *fait accompli*? If the terms and conditions are to be disclosed, they should be disclosed now".

India has been facing a widening trade gap since 1978-79. From Rs 1,088 crores that year, the figure rose to Rs 2,449 crores in 1979-80 and to as much as Rs 5,400 crores in 1980-81. The Commerce Minister, Mr Pranab Mukherji, even while claiming that exports would go up during the current year from Rs 7,100 crores to Rs 8,400 crores has held out no hopes that this gap would become narrower. India's foreign exchange reserves have remained steady in recent days. However, during the year ended July 31, 1981, foreign exchange reserves declined by Rs 234 crores or 4.6 per cent as against the decline of Rs 571 crores or 10 per cent in the preceding year. The picture becomes somewhat uncomfortable when the decline during the current financial year is taken into account. Between March 27 and July 31, 1981, the foreign exchange reserves declined by Rs 439 crores or 8.3 per cent.

A large part of exports are absorbed by the import bill on oil. During 1980-81 these imports totalled as much as Rs 5,400 crores and there are no immediate signs of the easing of this burden. The Minister for Petroleum, Mr P. C. Sethi, has held out the hopes that by 1984-85 indigenous crude oil production would rise to 30 million tonnes (off-shore 19 million tonnes and on-shore 11 million tonnes), a figure which is just one million tonnes short of the 1980-81 consumption. If the Government is able to curb the consumption growth rate of petroleum products, the gap in the demand and supply would then be nine to ten million tonnes which would have to be imported. There is no guarantee that the world oil prices will remain at their present level in the course of the next two or three years. But it is hoped that they would not rise to an extent where the gains of

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indigenous production will be neutralised by the rise in prices.

Some of the critics of the Government have been uncharitable enough to say that New Delhi's recent decision to treble the domestic price of crude oil to Rs 1,182 a tonne was prompted more by the preparations for the IMF negotiations rather than as Mr Venkataraman has explained to curb the consumption of petroleum products and also to meet rising oil exploration costs. It is pointed out that the Government has also cut the fertiliser subsidy, promised to reduce food subsidies, and is pursuing a fairly liberal import policy despite the huge trade gap. These measures, along with credit squeeze and a sharp hike in oil and fertiliser prices, have all been linked, in the eyes of the critics, to the adjustment programmes that the IMF with call for. Such adjustments programmes of the IMF include measures in key and sensitive economic areas : fiscal, credit, incomes, foreign borrowings and exchange rate policies as well as of trade and payments restrictions that are of direct concern to member countries. In the case of the other countries at least IMF has been insistent on this adjustment programme. What is in the bag for India is at present a matter of speculation.

Nepal's biggest ever budget

By BRAHMANAND MISHRA

NEPAL's biggest ever budget of a little over Rs 711 crores for the 1981-82 fiscal year which began on July 26, shows an increase of 93 per cent in development expenditure from Rs 257.3 crores to Rs 533.37 crores. The regular expenditure shows an increase of around 25 per cent from about Rs 142.49 crores to Rs 178 crores. Agriculture, industry and power have been accorded top priority with allocation for agriculture increasing by 114 per cent, from Rs 56 crores to Rs 120 crores, for industry by 600 per cent, from Rs 10 crores to Rs 61 crores, and for power by about 25 per cent from Rs 60 crores to Rs 73 crores.

Presenting the budget the first budget of Kingdom's elected government the Nepalese Finance Minister, Dr Yadav Prasant Pant, said that the proposals were oriented towards consolidating and making the economy self-reliant. Dr Pant, who maintained that the Nepalese Government was committed to remove the distortions that were prevalent in trade, finance and other economic sectors, assured the members of the Rashtriya Panchayat that the government was determined to overcome the hurdles in the implementation of the development projects and also to enforce financial discipline.

Emphasising the need for people's participation in local development, Dr Pant said that the development expenditure for the large projects to be implemented at the national level had been sufficiently increased. At the same time, a sizable amount had been allocated for the projects to be implemented at the local level Dr Pant, who ranks among the top economists of the kingdom, described the budget as designed "to make the economy people oriented". He said "since people's representatives are more capable of identifying and implementing development projects, it is expected that interest of the people in development activities will greatly be aroused by the availability of direct benefits of development".

Referring to King Birendra's speech of June 24, in the Rashtriya Panchayat in which the Nepalese monarch had declared "since the Nepalese society by now has achieved clear political direction, time has come for implementing economic and development programmes with dedication and determination", Dr Pant said "we shall accept the challenge of time and will be able to utilise all our available resources to the maximum extent for the fulfilment of basic needs of Nepali people. However, this goal can be achieved on active participation of the people. Therefore, the local panchayats should also devote their efforts to mobilising necessary participation, for the development of the country is possible only through collective efforts of all".

Later addressing newsmen at the historic Vilayati Baithak of the Singha Durbar, Dr Pant said that, though the budget showed a huge deficit of Rs 261.28 crores,the net uncovered deficit amounted to only Rs 32.5 crores as the government would be taking recourse to heavy borrowing internally and externally. He said, he expected a bilateral loan of around Rs 20 crores, multilateral loans of Rs 158 crores and internal borrowings of Rs 50 crores.

The Kingdom's dependence on foreign aid and loans to finance its development projects continued to be overwhelming. In the current fiscal year, which began from July 26, Dr Pant expects to receive about Rs 318 crores, nearly 60 per cent of the total development expenditure from foreign sources. Dr Pant said foreign aid was necessary to meet the targets set up for the Sixth Plan, and dependence on it would continue for some years to come though the aim was to reduce this component as far as possible. He said priority had been accorded to meeting the basic needs in such areas as drinking waters, schools and health services for which Rs 24.5 crores, Rs 3.9 crores and Rs 20.25 crores respectively had been earmarked.

It had been proposed to increase the pay scales and other facilities of the Government employees to provide some relief to them — Rs 100 to all non-gazetted (including peons), Rs 150 to gazetted class III and II and Rs 200 to gazetted class I employees. All the government employees including civil military and police personnel are to benefit from this provision.

Referring to some major tax proposals, Dr Pant said that income tax exemption limit has been increased for both individuals and families, customs duties and sales tax had been lowered on essential consumer goods like coarse cloth, canvas shoes and kerosene while the levies had been increased on luxurious items like air conditioners, refrigerators, cars, television sets and videos. A rebate of 99 per cent of land revenue had been provided to small farmers holding 1.5 bighas of land. Disparity between import duty rates on imports from third countries and India had been narrowed down considerably on a number of items.

Before it was remitted to the finance committee of the House for a detailed examination, prior to the submission before the House for final approval, the budget was assailed in the Rashtriya Panchayat. Increasing dependence on foreign aid, declining production in agricultural and industrial sectors, and educational, social and other taxation policies were among the issues picked up for criticism by several members who preferred to describe the budget as "impractical, unrealistic and exploitation oriented", and said it only reflected "lofty intentions." In the course of the debate, members expressed concern over dwindling forests, inflation, labour unrest, lack of clear educational policy, rising unemployment, drinking water problem and rampant corruption Mr Pena Cherring Gurung, who was declared elected unopposed from Manang district, said the government should do away with the practice of giving assurances only. Mr Lokendra Bahadur Chand, former speaker of the Rasthriya Panchayat, told the House that a "crisis of confidence has raised its head again in the country." He expressed surprise at the note of optimism struck by the Prime Minister, Dr Surya Bahadur Thapa when "despondency had become all pervasive."

A veteran Panchayat member, Mr Randhir Subba, who is regarded as a likely choice for inclusion in the cabinet, found nothing worthwhile in the budget for local development and Panchayat. There were no measures for consolidating units of the Panchayat system nor any programme to strengthen and promote democracy within the partyless character of the system.

Earlier the Nepalese Prime Minister, Dr Surya Bahadur Thapa, while winding up the nine day debate on the royal address to the first elected Rashtriya Panchayat devoted his statement to hitting out at the critics of the system and of government objectives in the economic development. His statement was regarded as the bluntest ever made against the critics of the system and even somewhat provocative. According to the Rashtriya Sambad Samiti, Kingdom's official and only news agency, Dr Thapa declared that the multi-party supporters who described the new constitution as undemocratic and impracticable were "no force to reckon with. Yet they are welcome if they wanted to join the mainstream by pledging loyalty to the system and the crown".

Dr Thapa told the House that propaganda was being made within and outside the Kingdom that the system was not liked by the people and it was imposed on them. The propaganda, according to Dr Thapa, "sought to make out the problem could be overcome if some kind of compromise was struck with particular individual". The propaganda was done "through foreign newspapers and radio and a situation was being created for external interference in the country's internal affairs."

Though the Nepalese premier did not name any one, it was evident he was referring to the former Nepalese Prime Minister, Mr Bishweshwar Prasad Koirala, popularly called BP. Dr Thapa declared that the solution did not live in striking any kind of compromise with any individual and there was none except the King who could have the last word on the question. Referring to the national referendum Dr Thapa said that it was not held under any pressure nor in response to "demand from any quarter." Not to abide by the verdict of the referendum was "tantamount to undermining democratic practice," he said and challenged the critics to substantiate their allegation that the referendum was rigged. The Prime Minister also said if "some persons do not want to be drawn into the mainstream it is not our fault. This was so because they were startled by the people's decision. They had been alienated from the people."

Meanwhile the predominance of foreign assistance is seen as a disturbing phenomenon in the Kingdom which, among other things, has corrupted the thinking values and attitude of the people. This was vividly brought out in two papers presented at a seminar held recently on current issues in Nepalese development, organised by the Centre for Economic Development and Administration, Tribhuvan University.

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The papers discussed a number of issues like the impact of foreign aid, development performance and domestic resource mobilisation for development. "Foreign phobia has become so extensive today that there is no sector or area that is free from its influence" one paper said. It noted the few projects that were being implemented were under some foreign assistance or the other. Further, foreign aid provided access to many commodities and projects normally not feasible with domestic resources. Cited among such projects were air ports, hotels, urban sewerage — "all far from the goals of fulfilling basic needs but not far from prestige needs of the elite."

What direction Pakistan's economy?

By B. M. BHATIA

AN interview with Mr Ghulam Ishaq Khan, the Finance Minister of Pakistan published in the Karachi weekly, *Pakistan Economist*, in its issue of August 1, 1981 provides important clues to his thinking on some of the important economic issues facing his country. The questions asked of him ranged from the directions of the country's present economic policies to the reported inflexibility in views that the Finance Minister was known to have.

Asked to define direction of the country's present economic policy, the Finance Minister stated that over the last four years the main aim of the economic policy of the country over the last four years had been "to make a determined and disciplined effort to revive, consolidate and restructure the economy." This was the immediate goal. "At a more fundamental level," he went on to add, "we have been trying to lay the foundation for a socio-economic order along the lines ordained by Islam."

The three pillars on which he wanted to build up the economic edifice of the country were, as he put it, "equity, effort, and efficiency." The aim of the Government in the economic field was "to bring about an improvement in the standard of living of the people, usher in overall prosperity and attain increased self-reliance and technological advancement so that in the long run we have a self-sustaining Islamic society based on justice, equity and human well-being."

These are well-worn cliches mouthed by politicians of the Third World countries every where and add up practically to nothing in reality. That much was clear from his own statement when he said: "The question of 'span of time' over which this is to be achieved is a more complex one. The challenge of economic development will remain with us for decade." Later in the statement, he went on to say that to make a significant improvement in living standards of the people in the country, it will take "a short period" of one generation or more. Even that would be possible only if the country is not subjected any more "to high voltage external shocks, in which

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Prof Bhatia is a close student of Pakistan's economy.

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case the process may drag on longer and beyond the time spans set......"

On the basic question of the need to correct the inherent imbalances from which the economy suffered, he had practically nothing to say to suggest that there was even realisation, on the part of powers that be, of the urgency of the problem. This is surprising because the Ministry's own *Economic Survey* for the year 1980-81 had drawn pointed attention to the "several structural weaknesses" from which the economy suffered and had called for pursuit of policies that would "correct the structural imbalances in the economy."

Overspending is the biggest problem of Pakistan. From this single fact flow all other economic problems that the country faces. The Government spends more every year than what it gets by way of its revenues. That gives rise to deficit financing on the one hand and foreign borrowing on the other. People spend more on current consumption than what a developing country could afford to do. That reduces the rate of saving and creating a wide gap between investment and saving levels in the country. What is Pakistan Government doing to stop the spending spree in the country is the question that needs most to be answered. Unfortunately, it is precisely on this subject that the interview discloses the Finance Minister to be at his weakest. He does not even accept the fact of overspending by the nation. Inflation and heavy annual external payment deficits are due to external environment and forces at work which are beyond the country's control, according to him. The Government, he feels, has little responsibility in the matter nor can it do much to control the situation.

To begin with, take inflation for instance. At the time of publication of the budget at June end, the inflation rate in the country was 13 per cent. This in itself should have dissuaded the Finance Minister from administering a further heavy dose of deficit financing or raising the administered prices of various necessaries of life sold through the public sector. And this is precisely what he did. When asked to comment on this contradiction between the professions of the Government and its performance on the subject, the Finance Minister, instead of giving a straight and cogent answer indulged in a long-winded comment on the nature and causes of inflation in Pakistan as he saw them.

There were three facts about inflation to be remembered. The first was the structure of prices. High support prices offered by the Government for wheat, rice and sugarcane had brought about increase in agricultural production. This increase in supply brought about by rise in prices could not lead to fall in prices. Of course, subsidies could be given to keep down prices of wheat, sugar and other articles of daily consumption. But subsidies on a wide scale are not possible or even desirable because "if subsidies are financed from deficit financing the effect is just as inflationary." Besides, "distortions in prices from real costs have all kinds of adverse resource allocation effects." This argument would wash if the Finance Minister were avoiding deficit financing or at least trying to reduce it. As things stand, the current year's budget deficit is the highest in recent years.

To the charge that deficit financing is being heightened instead of being reduced the Finance Minister had no reply and parried the accusation by stating that alternative to deficit financing of the level they were having in Pakistan was taxation of even more regressive nature than deficit financing was and that the level of deficit financing indulged in by the country could not be described excessive as "projected deficit financing of Rs 5,444 million in 1981-82 would constitute about 1.7 per cent of anticipated GDP and around 9 per cent of the Federal Governments expenditure, compared with 4 per cent and 20 per cent in 1976." But why not reduce public expenditure, especially on defence, to eliminate deficit financing altogether? This question was not posed for obvious reasons. Deficit financing by a developing country can at best be justified to meet a part of developmental expenditure and not extravagant consumption expenditure. This simple truth does not seem to carry any weight with Pakistan ruling elite.

The other immediate problem facing Pakistan economy is the annual external payment deficit. On this question again the Minister tried to play down the gravity of the situation by stating that the situation by no means was alarming. On the contrary things were improving: "Exports (in the last two years improved) at the rate of 30 per cent, more than half due to volume; imports by 20 per cent entirely due to prices. The current account deficit in the balance of payments, despite the deterioration in global economic environment did not worsen." He forgot that his statement on the subject implied further worsening of country's terms of trade which could not be a matter of satisfaction to him.

Secondly, the question is not of further worsening of balance of payments position which is already serious. What is important to know is what is being done to improve the payment position and extricate the country from abject reliance on increasing flow of foreign aid. The seriousness of the present situation was admitted by himself in another part of his interview when he stated: ".....net aid transfers to Pakistan declined from $766 million in 1975-76 to $347 million in 1980-81. At the same time, the net non-project transfers were transformed from an *inflow* of $388 million to an *outflow* of $504 million." (Italics added) That showed the true gravity of the country's external payment position which unfortunately fails to merit even a thought from the Finance Minister.

The most astounding part of his answers to the interviewer's questions related to the relevance of economic principles to the fiscal and economic management of the country's finances. Told that people believed he was rigid and inflexible in his views, he had the following comment to make: This charge against him is "not correct in the sense that I have never allowed myself to be immobilised by theory. I have always followed a pragmatic and practical approach without of course losing sight of basic objectives and fundamental principles and that automatically implies flexibility." In other words, he was concerned to live in the present and not bother about the consequences of his actions and policies to the future of his nation.

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Bangladesh: Marginal drop in population growth

From A. ZAKERIA SHIRAZI

DACCA

THE preliminary report of the second census of Bangladesh was published recently. The census was held on March 6, 7, 8, 1981. Although the previous census had been due in 1971 it was not held till 1974 because of the liberation war. Thus the present preliminary result gives a picture of comparative septennial rather than decennial growth. A total of 206,000 enumerators, with 5 per cent reserve, under 46,000 supervisors worked for three days in 801 "census zones" of the country and obtained data whose findings carry the following highlights.

The population of Bangladesh, according to the preliminary report is 8,70,52,024 the sex ratio being 106 males for every female. However, the report says that allowance should be made for under-enumeration which, it says, is the practice in census enumeration in almost every country. A post-enumeration survey conducted within fifteen days of the census showed that 6 per cent people in urban areas and 3 per cent people in rural areas and in total 3.32 per cent people were left out of the census. After adjustment of the under-enumeration total population has been estimated at 8,99,40,000.

The population highlights (without adjustment of underenumeration) are the following :

	1981	1974
Total population (in thousand)	87052	71479
Number of households (in thousand)	1535	12679
Average number of member in each households	5.7F	5.64
Population per square mile including river area	1566	1286
Population per square mile excluding river area	1675	1375
Per capita land (acre)	0 38	0.47
Annual increase on the basis of adjusted population %	2.36	2.70

The publication of the report has given a moment's relief to the economic planners of Bangladesh. Where result had been predicted and annual rate of growth was so long assumed to be 2.80 it turned out to be 2.36 as indicated by the census report. But experts also concede that any euphoria over the somewhat lessened pace of growth is not only premature but positively harmful. Population has been declared the "number one" problem of the country. Most ministries have a population cell and a National Population Council has been formed headed by the President of the country.

All development efforts are being threated by the demographic swell and there is no sign of any increase in per capita income or over-all economic improvement. Detailed statistics about literacy, employment, etc are awaited. The previous census of 1974 showed that though 5 million more people had become literate in 13 years, the percentage of literacy was only marginally up from 19.9 to 22.2. The growth of population had offset any gains in absolute terms. The statistics regarding literacy, when they are published, will assume special significance because of the Government's much heralded campaign launched last year to universalise literacy within five years. Only skepticism greeted such an impossible target.

In another overzealous bid the Government declared two years ago that all-out efforts would be made to stabilise population at 10 crores. Not only was the target impractical but it was not matched by concrete steps aimed at drastic reduction of growth rate.

Significantly, while the cause for the slightly slowed rate of population growth is yet to be determined, no one is eager to give credit to the family planning department. Surveys have shown that the percentage of fertile couples who adopt family planning is no higher than 15 and accepters of sterilisation would be around 2 per cent of the fertile couples who number 16 million. At best family planning could have had a marginal impact so far. At present and in the foreseeable future population will continue to be the most urgent national concern.

Growth of tourism in South Asia

By DALTON DE SILVA

REPRESENTATIVES of the tourist industry and officials of government departments from five South Asian countries met in Sri Lanka recently to discuss their common problems and came up with several recommendations for the development of tourism in this region.

The three-day regional meeting organised by the California based Pacific Area Travel Association (PATA) in collaboration with the Sri Lanka Chapter of PATA and the Tourist Board of Sri Lanka was attended by 50 delegates from Bangladesh, India, Nepal, Pakistan and Sri Lanka.

Mr Lakshman Ratnapala, Director of Chapter Services of PATA, told a news briefing after the conference that this was the first time that senior officials of government departments outside tourism had sat together with leaders of the tourist industry to discuss areas of common interest on a regional basis

The conference, which had as its theme the place of tourism in South Asian development, discussed a wide range of subjects relating to the travel trade from the role of government in tourism to "tourism and the economy" and the relationship of tourism to the work of the immigration, customs and civil aviation departments.

India was represented by a top level delegation from both the tourist industry and the government sector. Tourism consultant, Mr S. N. Chib, spoke on the relationship of tourism to development goals of South Asia while Mr S. V. N. Ranga Rao commercial manager, Air India, presented a paper on the role of transport in tourism. Mr Inder Sharma, chairman of Sita World Travel Pvt Ltd of New Delhi, spoke on regional cooperation in tourism.

Senior officials from the departments of tourism, airports authority, civil aviation, immigration and customs of the Government of India, who attended the conference, also participated fully in the discussions, a conference spokesman said.

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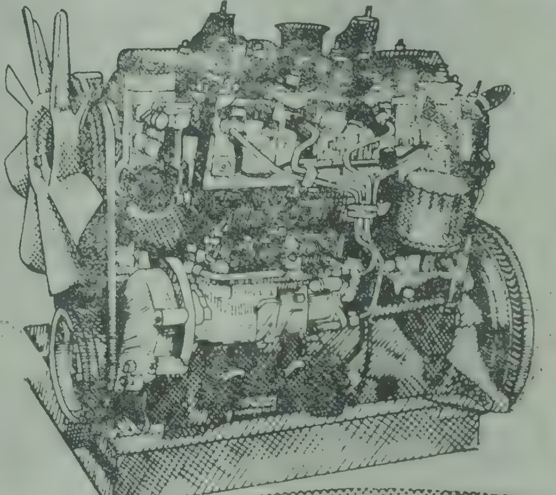
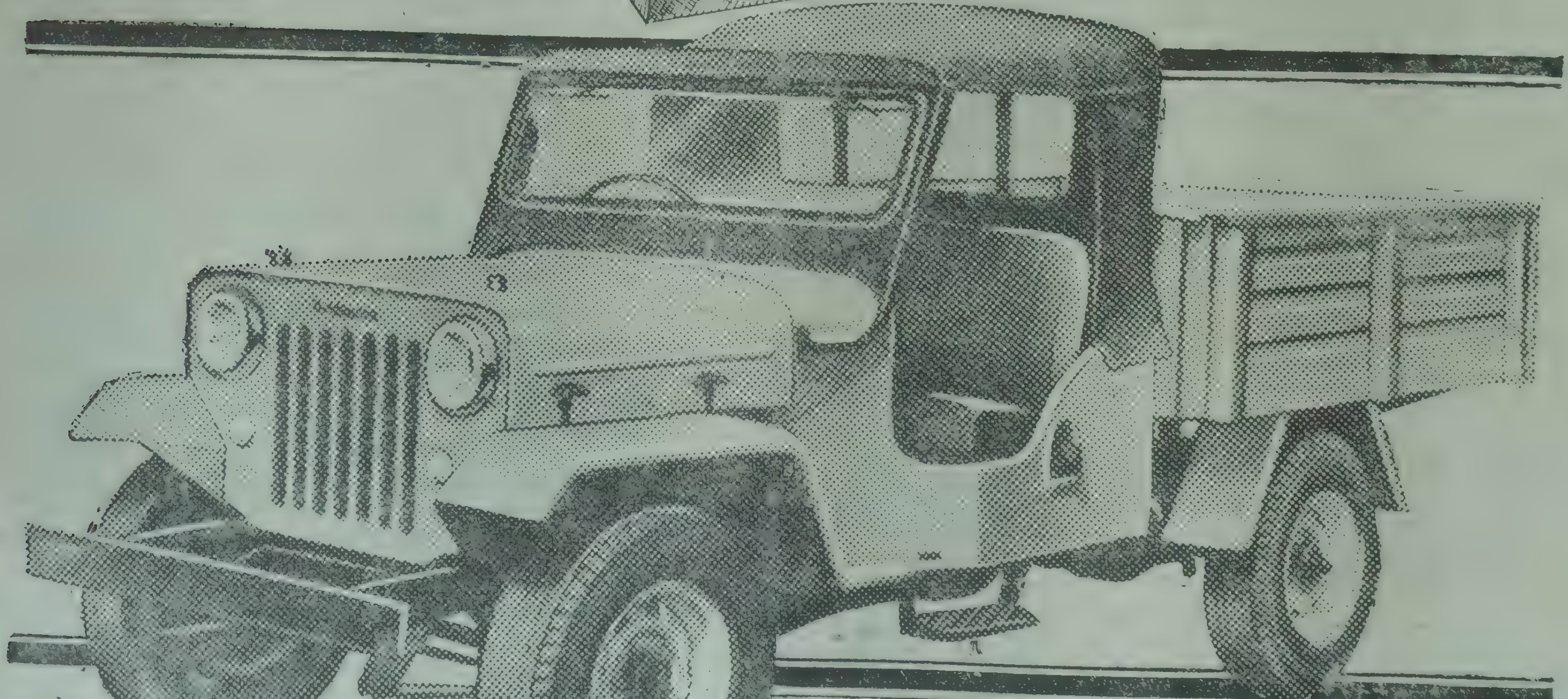


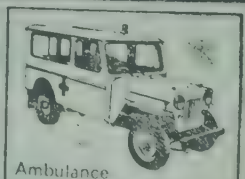
Engine Specifications :

No. of Cylinders	4
Bore-mm	90
Stroke-mm	83
Bore Stroke ratio	1.08
Displacement-cc	2112
Compression Ratio	22.4:1
R.P.M. (max)	4500
Max. B.H.P.	75
Max. Torque Kg.m.	13.3 @ 2000 r.p.m.
Weight Kg.	184



The Mahindra NC 665 DP Mini Truck fitted with Peugeot XDP 4.90 diesel engine

Pick-up Van



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A statistical summary of South Asian tourism placed before the conference showed that the number of visitors to the five countries increased from 492,000 in 1970 to 896,855 in 1975, and jumped to 1,649.582 last year. Of the tourists who visited the South Asian countries last year, Bangladesh received 65,760, India 800,150, Nepal 162,880, Pakistan 299,012 and Sri Lanka 321,780.

Comparable figures indicated that Sri Lanka had an unprecedented growth rate of tourism of 28.6 per cent last year compared with the previous year while the growth rate in Bangladesh was 15 per cent, India 4.6 per cent and Nepal 0.4 per cent. Pakistan had 6.1 per cent less tourists last year than in the previous year.

Mr S. N. Chib of India told the conference that Sri Lanka's growth rate of tourism has been the highest in the last 10 years, not only in Asia but in the world as a whole. "It was 25 per cent to 30 per cent even in the last two years when it was almost stagnant in the rest of the region." What is more significant, he said, is that the length of stay in Sri Lanka is more than 10 nights, higher than in some of the larger countries of Asia.

Of the 1,649,582 tourists who came to South Asia last year as many as 712,586 were from Europe comprising 43.2 per cent.

The average spending by tourists per day in the five South Asian countries in 1979 was $ 21.5 in India, $ 18.4 in Pakistan, $ 28.2 in Sri Lanka, $18.1 in Nepal and $ 5.8 in Bangladesh. This was low compared with the level of spending in most other countries in the region — Singapore ($ 77.5), Thailand ($ 67.8), Hong Kong ($151.5), Philippines ($26.2), and Indonesia ($ 59.5).

Mr H. M. S. Samaranayake, director general of the Sri Lanka Tourist Board, speaking on the impact of tourism, told the conference that the low spending by tourists in the South Asian countries was partly explained by the illicit trafficking in foreign exchange due to the existence of a black market and the lack of opportunities for shopping and entertainment.

The conference in its discussion on the role of government in tourism also considered how cultural pollution or the evil effects of tourism like prostitution, nudism and drug pushing could be controlled. Sri Lanka Minister of State, Anandatissa de Alwis, who opened the conference, had drawn the attention of the delegates to this problem among others.

The conference felt that governments had a regulatory role to play when they perceived the national interest affected. It said this regulatory action by government should, however, be kept to the minimum level necessary to bring a given situation under reasonable control.

As the tourist industry grew it attracted elements that had short-term profit motives which conflicted with long-term national or industry interests. The tourist industry should, therefore, devote attention to the establishment and effective operation of self-regulatory mechanisms, reducing thereby the need for statutory controls it said.

"Regulatory systems should not be cumbersome or unenforceable", the conference recommended adding "where controls can be established without the requirement of legislation, this should be encouraged". It also said that consultation between government and industry in the establishment of regulatory systems was desirable.

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While recognising the pre-eminence of national security considerations in the work of immigration departments, it said considerable progress was possible in the area of the standardisation and simplification of forms and procedures on a regional as opposed to the present national basis. The conference supported the introduction of a standard entry and departure card and where possible of the carbonised paper form which eliminated the need for departure card completion. The professionalism of the immigration and customs staff and the upgrading of the equipment they use could contribute considerably to improving "the visitor experience", it said. The conference recommended that where visas remain necessary, attention should be given to expediting their issuance.

While accepting security checks as an accepted part of airport departures, the conference said specialised staff and equipment could reduce visitor inconvenience.

The conference applauded the introduction of two channel customs clearance system and advocated the introducting of similar systems throughout the region.

MFA or imports at minimum prices?

Concluded from page 326

Common Market sources refuse to take the idea of "threshold" prices seriously. But the fact that it is being put forward at all points to a dissatisfaction with the MFA. Among the arguments being invoked against its continuation are the following:

(1) The MFA is essentially an American invention, based on the hypocritical principle of self-restraint. However, the quantities involved are so large now that exports can no longer be regulated in this way. In any case, with the market for many items seasonal rather than annual, it is unrealistic to fix quotas for a 12-month period. Exporting countries, by concentrating their sales over a very short period, can completely disrupt the market.

(2) The developing MFA countries account for only a limited proportion of the Community's total imports. The real beneficiaries of the restrictions imposed on the developing countries are more likely, therefore, to be other industrialised countries and *not* the European industry. Major beneficiaries in fact are Spain and Portugal. The US is another: as Hongkong has pointed out. US prices are lower even than those of developing countries for a number of textile and clothing items.

(3) The proliferation of import quotas is both unhealthy and an invitation to fraud. Fraud in fact is bound to increase as more and more products from more and more exporting countries are made subject to quotas. The growing complexity of the system is certain to make its operation increasingly difficult, and it may well collapse under its own weight.

These arguments are very different from the ones which the EEC's representatives are putting forward in Geneva. It is obvious, however, that the system of bilateral agreements operated by the Community is already a very complex one, and as such probably hampers the flow of trade. Instead of simplifying it, the EEC seems determined to make the system even more complex.

Disciplining bank employees

SIR,—Recently the State Minister for Finance had a discussion with the chief executives of financial institutions on the need to discipline the staff and better the customer service. It is felt that the climate created by the Essential Service Maintenance Ordinance should be utilised to bring about this.

Is discipline confined only to staff? Is there no indiscipline at other levels and in the public life? Can the ordinance bring about discipline?

Customer service in banks is not confined only to service at the counter. Delay, indecisions, and indifference to advances proposals specially when they are for small loans, and to complaints has affected customer service. This is not handled by staff. A growing feeling in the public is that complaints do not receive any attention but result in pinpricks later on. So they would rather not complain.

Recently there were few cases of students approaching higher authorities when they failed to get a response from the manager for educational loans. Later on the manager told the students that if they do not recommend their proposals, higher ups could do nothing. They took the stand that because students had approached the higher ups they would not recommend. Higher ups said that if the manager recommends then only they could sanction the loans. Here it is not the indiscipline of the staff that came in the way of customer service.

Many a time indiscipline of the staff is the result of indiscipline at higher levels. Delayed decisions, biased decisions and indecisions on staff matters are resented at the lower level. This results in a grievance, but the grievance is not promptly looked into.

Placement, transfers and promotions are not fair according to many staff members. They point out how in many cases orders of transfer or placement are cancelled after lobbying by the concerned. But in other cases they had to go to the place as per orders. They feel lobbying is necessary for promotion. It is reported that lobbying is necessary even for the appointment of chairman.

To The Editor
LETTERS
COMMERCE WEEKLY
Manek Mahal, 90 Veer
Nariman Road, Bombay-400 020.

There were reports that the affairs of a nationalised bank had reached a point of deadlock in the absence of a full time chairman when the appointment was delayed. This resulted in inner feuds among the top officials. There was no team spirit at the top. This was the result of delay and indecision at the ministry level. Has the ordinance created climate to avoid such a situation which results in indiscipline? Then what about indiscipline of the rules?

Indiscipline is not the monopoly of the staff. It is the reflection of indiscipline everywhere.

S. R. Prabhu
BANGALORE

Black money

SIR,—So long as there is the ballot-paper democracy needing lot of funds which are met only through black resources, there is little hope of eradicating it. The sources of black money are licensing of permits and quota system, restrictive trade practices, restriction on movements and the flood of stringent legislations with unlimited powers to bureaucrats. The economy of scarcity or shortages has been the main plank of our planning and these shortages are ever widening—you have to pay a premium of Rs 1,000 on a scooterate, Rs 7,000 on a Premier Padmini or Rs 15,000 on a Mahindra Jeep due to price control. The eradication of black money can be attained if all these restrictions on production, movements, permits and quota systems, licensing systems and the spate of thousands of restrictive laws are done away with. Anyway who wants it? All talk of black money is an eye-wash.

Tatya Tendulkar
KOLHAPUR

Controlling inflation

SIR,—The anti-inflation measures are not likely to be effective in controlling prices. Except import of wheat and edible oils—and we should compliment the Government on the quiet and businesslike manner in which wheat purchases were made at low world prices—the other measures will either be marginally effective or trigger off fresh inflation as in the case of petroleum product price increase.

The main reason is that the roots of inflation are untouched. Inflation has arisen primarily from uncontrolled government expenditure—both Central and State — and consequent deficit financing.

A new set of remedies is required. Briefly, government should :

(1) give up all unnecessary activities.

(2) concentrate on improving production and productivity in crucial sectors—railway transport, power, coal, banking and insurance service, post and telegraph and telephones.

(3) sell 49 per cent of public sector shares to employees and public and give the units autonomy (consequently, no government funds from tax-payers' money or deficit financing), and

(4) introduce modern management practices in government. For instance, a 5 per cent improvement in handling Central revenues will mean improved cash flow of Rs 1,000 crores. It is a pity that a 200-year old treasury system is run on outdated rules blocking crores of rupees unproductively.

M. R. Pai
BOMBAY

Indian banks abroad

SIR,—This refers to Table 14 (Indian Banks abroad...June 1981) on page 56 of Supplement on Banking in *Commerce* dated July 25, 1981.

Bank of India has a branch in Grand Cayman (Cayman Islands), which has not been included therein.

S. Ravindranath
AHMEDABAD

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Special Reports

Resources for private sector

From OUR SPECIAL CORRESPONDENT

BOMBAY

THE private corporate sector has been assigned an important role in the Sixth Plan period. In view of the resources constraint being faced and likely to be faced by the public sector financial institutions, the private corporate sector is expected to be mobilise more resources on its own than in the past years. In this context, the workshop on "Resource mobilisation in the private corporate sector" held in Bombay on August 8 under the auspices of The Associated Chambers of Commerce and Industry in India assumed added significance.

At this workshop, which was attended by captains of industry, besides the Governor of the Reserve Bank of India Dr I. G. Patel, who presided over the workshop, and officials of the Reserve Bank of India, the Industrial Development Bank of India, the Industrial Credit and Investment Corporation of India, The Industrial Finance Corporation of India, The Life Insurance Corporation of India, The Unit Trust of India, some nationalised banks as also some prominent industrial and financial consultants and financial journalists, several useful suggestions were made to revive the capital market, which is so very necessary for helping the private corporate sector to mobilise resources on its own, as also for helping it to plough-back its own resources through necessary changes in the fiscal and monetary policies.

Dr Patel suggested that some nationalised banks like the State Bank of India, Bank of Baroda and Bank of India, can be permitted to accept deposits from abroad at rates prevailing in the international markets, with a provision to repay these deposits in foreign currencies in which these were received. Dr Patel said these banks could hold such deposits on behalf of the Government of India. He pointed out that as it is, the Government was currently resorting to commercial borrowing abroad. He was confident that several investors, including non-resident Indians and Indians residing abroad, could be attracted to keep their funds as deposits with Indian banks.

Dr Patel said that such a step had become necessary in view of the resource constraint experienced by term-lending institutions like the IDBI. He suggested that the Indian banks could issue deposit certificates for six or twelve months by paying higher interest than they were currently paying on such deposits in India. Such funds could also be utilised for the use of Indian private entrepreneurs who were currently borrowing abroad or who were setting up joint sector projects in other countries. Dr Patel thought that we should take advantage of the liquidity in foreign financial markets which had developed mainly due to the growing oil surpluses.

Dr Patel pointed out that the term lending institutions did not have at their disposal unlimited resources. The Reserve Bank of India had been making available to them Rs 200 crores to Rs 250 crores per annum from its own profits and banks had been subscribing to their debentures and bonds. He pointed out that a deliberate structure had been created for providing funds to the private corporate sector at concessional rates. However, since there were limits to RBI profits as also limits for raising resources by issue of bonds, financial institution would have to evolve criteria for rationing their assistance in accordance with certain prescribed priorities. He said it was against this background that resort to foreign financial markets acquired significance. He said there was need to step up the national savings and those of the corporate sector itself.

Referring to the plea made in several quarters that enough credit should be made available to large industries, the

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Aug. 14, 1981 over		
		Aug. 14, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.60	3.50	3.50	2.80	2.9	2.9	28.6
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.30	2.20	2.20	2.00	4.5	4.5	15.0
Bajra	Average	2.30	2.20	2.20	2.00	4.5	4.5	15.0
Gram dal	Average	6.50	6.30	6.20	5.95	3.2	4.8	9.2
Tur dal	Average	6.80	6.60	6.50	5.50	3.0	4.6	23.6
Potatoes	Average	2.40	2.40	2.00	2.60	—	20.0	—7.7
Onions	Average	1.80	1.60	1.60	1.00	12.5	12.5	80.0
Milk per litre	Buffalo	6.60	6.00	6.00	4.30	10.0	10.0	53.5
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.25	—	—	24.0
Sugar	Average	6.80	7.00	6.50	8.25	-2.9	4.6	—17.6
Gur	Average	6.60	6.60	6.00	6.00	—	10.0	10.0
Groundnut oil	Average	18.00	16.00	15.00	11.00	12.5	20.0	63.6
Vanaspati	Average	17.00	16.50	16.00	—	3.0	6.3	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

RBI Governor pointed out that large industries were not denied credit facilities. In fact, credit support to small industries was not what it should be. It was the small industry which was suffering in terms of relative importance. He suggested that instead of asking for more credit, industrialists should attempt to restrict their demand for credit. particularly because bank lending had become quite costly. They should ask their executives to plan accordingly.

Dr. Patel made it clear that the credit policy would have to remain tight and that the Tandon and Chore Committee norms would stay. He pointed out that high interest rates and restrictive credit policy discouraged holding of inventories. The dear money and restrictive credit policies had discouraged misdirection and mis-utilisation of credit to a great extent. He also pointed out that in the context of the present economic situation in the country, industrialists would have to reconcile to a fairly high level of taxation and high level of interest rates. He however, favoured a stable tax system.

The RBI Governor said a high interest rates structure was necessary to divert savings from less desirable to more desirable channels. Presently, unnecessary investment was being made in inventory and residential accommodation. Concealed income was being used for acquiring real estate. To prevent such unhealthy practices, he suggested that it was necessary to bring out legislation to the effect that no residential property could change hands unless there was an open auction held by the government.

Dr Patel said a study could be undertaken to disaggregate the household sector and define a link between the household sector and the corporate sector for channelising the savings of the former to the latter. He said total savings in the economy and particularly in the various sectors which would generate resources for the corporate sector, should be studied. Efforts would have to be made to see if savings generated which were currently used for unproductive purposes could be diverted to the corporate sector for productive purposes. This could be achieved by discouraging investments in inventories and residential accommodation, he felt.

In his welcome speech, Mr A. Sivasailam, President of *ASSOCHAM*, said that the private sector would be able to fulfil the role envisaged for it in the Sixth Plan, only if drastic changes were effected consciously with sympathy and understanding in both fiscal and monetary policies.

Mr Sivasailam pointed out that the workshop had been organised to discuss the study on resource mobilisation in the private corporate sector made by the National Institute of Public Finance and Policy.

The study has been conducted by a team of economists headed by Dr V. D. Lall, who was the project leader. The other members of the project team were Srinivasa Madhur, K. K. Atri and Ranjana Ghoshal. Dr R. J. Chelliah, Director of the National Institute of Public Finance and Policy, took keen interest in the project throughout its duration and drafted some chapters jointly with Dr V. D. Lall.

Mr Sivasailam pointed out that the study clearly belied the popular impressions regarding the financing pattern of companies in the large sector. It revealed that corporate savings consisting of depreciation and internal plough-back including bonus shares accounted for 64 per cent of the gross resource mobilisation. Long-term loans accounted for 7.2 per cent, debentures 1.9 per cent and fresh equity capital 5.7 per cent.

He pleaded for a reduction in corporate tax and for higher rates of depreciation. He said in the context of paucity of funds and a steady rise in prices, industrial units had limited choice to use their long-term resources mobilised for working capital purposes. He said reduction in corporate tax and higher depreciation were not alternatives but complementary. The proportion between the two would vary from company to company. He pointed out that higher depreciation in a particular year would not result in reduction in tax but would mean postponement of its collection. He called on the authorities to look to the issue dispassionately.

Mr Sivasailam said the private sector had an important role to play. We would have to consider whether targets set for it could be fulfilled, whether the current policies were conducive to achieve the targets and whether any modifications were necessary in policies to achieve the desired objectives.

Bombay spot exchange rates of currencies as on 17-8-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.60	9.80
Austria	A. Schilling	193.00	199.00
Belgium	B. Franc	454	463
Canada	C. $	13.34	13.81
Denmark	D. Kroner	87.40	88.80
France	Franc	66.10	67.60
Hong Kong	H.K. $	64 80	66.80
Italy	Lira	13,780	14,020
Japan	Yen	2530	2580
Malaysia	M. $	25 80	26.60
Netherlands	Guilder	30.60	31.10
Norway	N. Kroner	68.50	69.70
Singapore	S. $	23.60	24.40
Sweden	S. Kronor	58.50	59.60
Switzerland	S. Franc	23.80	24.30
UK	£	6.1060	6.1590
USA	$	10 87	11.07
West Germany	D.M.	27.60	28.10

Corporate profits

Dr R. J. Chelliah and Dr V. D. Lall explained the major conclusions of the study. The study points out that corporate savings consisting of depreciation and internal plough-back (including bonus shares) accounted on the average for 64.2 per cent of gross resources during the period of the study (1962-63 to 1975-76). Such a high proportion of corporate savings is partly due to the low level of capital formation which did not require much resource to be made to external resources, as also due to the rising value of new capital assets resulting in increasing monetary value of chargeable depreciation.

Gross fixed asset formation by the companies selected in the sample during the 14-year period amounted to 66 per cent of gross resources mobilised during that period and 92.8 per cent of gross resources of a long-term nature. The annual rates of fixed capital formation and additions to plant and machinery in real terms formed a declining percentage of the existing capital stock. Sectoral analysis has revealed that the size of a company seems to have a bearing on both the level and pattern of resources mobilisation.

The study points out that action would have to be taken on several fronts in order to bring about conditions in which the corporate sector could grow more vigorously so that its contribution to domestic investment and savings could rise over the years. One of the important areas in which remedial action can be taken relates to the taxation of corporate profits. It has been pointed out that the effective tax rate has an important bearing not only on the volume of resources mobilised but also on the ratio of equity to debt finance and that of retentions to fresh issues.

The finding of the study is that the market for equity capital has not been growing in line with the requirements of the corporate sector. It suggests that if the corporate sector is to grow and flourish under healthy conditions, it would be necessary to revive the equity market. Several suggestions have been made to revive the capital market. These include extension of the scope of investment by corporate and individual shareholders, raising the exemption limit of dividend income for computing the tax base and creation of a bond market.

It has also been suggested that the question of granting an adequate measure of short-term credit for inventory financing by the manufacturing corporate sector should be reconsidered in the light of the steep increase in the prices of inputs. Denial of short-term credit would lead to diversion of long-term funds to short-term purposes, with undesirable implications for the growth of investment.

Mr N. N. Pai, chairman of the industrial Development Bank of India (IDBI), stressed the need for resource mobilisation by the private corporate sector, which was currently small. He said it was desirable that the corporate sector should tap savings of the household sector through the capital market.

Mr Pai said the criticism that the convertibility clause hindered capital formation in the private sector was outdated. In the last 16 months, the financial institutions functioned in such a manner that their cumulative holdings in an enterprise did not exceed 40 per cent. He pointed that financial institutions were interested only in financing growth of the industrial sector. They were not interested in the take-over of units if these were run efficiently, with due regard to social priorities and overall government policies. They were, however, interested in ensuring that the assisted companies followed sound managerial practices.

Funds from abroad

Mr Pai said there was no clash of interests between the financial institutions and the assisted units. On the contrary, their interests converged. It was only fair that the financial institutions should share the prosperity of companies assisted by them. He emphasised that the financial institutions would do everything possible to promote industrial development.

Mr H. T. Parekh, former chairman of the Industrial Credit and Investment Corporation of India, said that the gap between the resources likely to be mobilised by the corporate sector and its needs in the Sixth Plan period was likely to be Rs 400 crores to Rs 450 crores. He agreed that the capital market was now capable of providing more funds for the growth of companies. However, efforts would have to be made to tap more and more funds not only in the domestic market but also from abroad. He suggested allowing companies to have accelerated depreciation whenever they made profit. This was necessary because the year-to-year change in the profitability of a company had an impact on new capital investment.

Mr Parekh was happy that the trend noticed till recently to have less and less equity was changing and that equity base was expanding. He said there was good scope now for companies to raise resources from the capital market through issue of new capital or bonds.

Mr M. S. Patwardhan, a former president of the Bombay Chamber of Commerce and Industry and managing director of NOCIL, said there were psychological and non-financial factors which were impending the growth of the corporate sector. He pointed that the MRTP and large companies were using their funds for working capital because they were not getting licences for expansion or diversification. Price control in industries like cement, sugar and pharmaceuticals had affected even large units. He said unnecessary controls should be dismantled. The stiff import duty on capital equipment was nothing but a tax on development, he said.

Mr Patwardhan suggested that the limit for acceptance of deposits by companies should be raised from the present level of 35 per cent of their capital and free reserves to 45 per cent. Providend funds and super annuity funds should be allowed to put in 10 to 15 per cent of their investible funds in secured debentures of companies. This would a long way in helping companies to raise funds through debentures and bonds, he said.

Mr Raunaq Singh, noted industrialist, said that the recent anti-inflationary measures like the hike in petroleum product prices would lead to an increase in industrial costs. He said the capital market must become more vigorous. He suggested that bank advances against shares should be allowed.

Mr Raunaq Singh pointed out that the dividend was taxed twice — first at the company's level and second at the individual's level. He felt that if the tax on dividend was done away with for the individual, it would help reviving the capital market to a large extent.

Dr R. K. Hazari, a former Deputy Governor of the Reserve Bank of India, expressed unhappiness over the methodology or conclusions of the study. He pointed out that the real growth rate level had fallen since the 1960s. He suggested that in order to give appropriate return to the investors, the Life Insurance Corporation of India should emulate the example of the Unit Trust of India. He felt that the monopoly of the LIC should be broken and large organisations should be permitted to have group insurance of their employees on their own.

Dr Hazari said there was no alternative to higher capital formation. He, however, cautioned against present buoyancy in the stock exchanges. He said he was strongly opposed to lowering of bank deposit rates in an effort to make investment in equities more attractive. He said high taxation was not a path to socialism.

Dr Hazari said Tandon and Chore Committee norms should be applied more vigorously. He said financial institutions should accept the logic of these reports. He pointed out in many cases financial institutions did not provide margins needed under the Tandon or Chore Committee norms.

Reserves

Mr M. P. Chitale, a tax expert, suggested that companies having modernisation programmes should be allowed to create earmarked reserves. He said it should be ensured that resources were used properly and efficiently. He felt that for growing companies, the current tax structure was not high. On the contrary it was favourable. He said in many cases, poor profitability was not the result of inefficient management but mainly because of government policies. He said investible funds would naturally flow to companies with high profitability from those with low profitability.

Mr Chitale said currently the equity market could not cater to an investor who wanted to have income. Development of an active capital market with various types of instruments for different types of investors was necessary, he said.

Dr P. R. Brahmananda, a noted economist, said reduction in taxes and higher depreciation allowance would have to be considered in the larger perspective. He suggested that the working of banks and financial institutions should be made more economical. Currently, banks and financial institutions were not mobilising funds, they were only lending funds. He advocated a higher interest rates structure.

Prof Gangadhar Gadgil, a business economist, said the most important was profitability of a company. He said indirect taxes and price controls affected profitability much more than direct taxes did. He suggested that study should be undertaken to know from where money was coming to equity issues.

Mr N. C. Chaudhari said it was necessary to make the cake bigger before making arrangements for distributing the same.

Mr Bhattacharyya suggested that the first 500 large companies should be asked to have inflation-corrected balance sheets.

SCI crosses 5 million dwt mark

BOMBAY

THE Shipping Corporation of India's (SCI) tonnage crossed the 5 million dwt mark on August 12 this year with the acquisition of a medium range tanker, 'C. V. Raman' from the Mitsubishi Heavy Industries Ltd, Kobe, Japan. The SCI has ordered another tanker of the same class, called Homi Bhabha.

Addressing a press conference to mark the occasion, Vice Admiral R. K. S. Ghandhi, vice-chairman and managing director of SCI, said his organisation today ranked among the biggest shipping companies in the world and was the fifth largest liner company in the world. SCI crossed the first 1 million dwt mark in 1970, 2 million dwt in 1973, 3 million dwt in 1975 and 4 million dwt in 1976.

He said, SCI had a big expansion plan for the Sixth Plan period. SCI had submitted a proposal for the acquisition of 47 vessels involving a financial outlay of Rs 800 crores. The vessels would comprise container oriented cargo liners, fully containerised vessels, tankers and bulk carriers.

In 1961, SCI began with a modest fleet of 19 vessels totalling 0.19 million dwt. These vessels operated a limited number of cargo liner services to Australia, Japan, USSR, Poland and UK/Continent, passenger services to Malaysia and East Africa and tanker services along the Indian coast. As India's trade pattern changed in the ensuing two decades, SCI ordered and acquired cargo liners, container oriented cargo liners, bulk carriers, combination carriers, crude carriers, product carriers, very large crude carriers, passenger-cum-cargo vessels and timber carriers. SCI today owns a fleet of 147 vessels of 5.02 million dwt.

SCI has network of cargo liner services covering all continents except South America Vice Admiral Gandhi said, SCI was prepared to start a service to South America provided the ships got remunerative cargo on the way back. He said, he had sounded the Argentinian and Brazilian national lines during his recent trip to South America and received a favourable response from them.

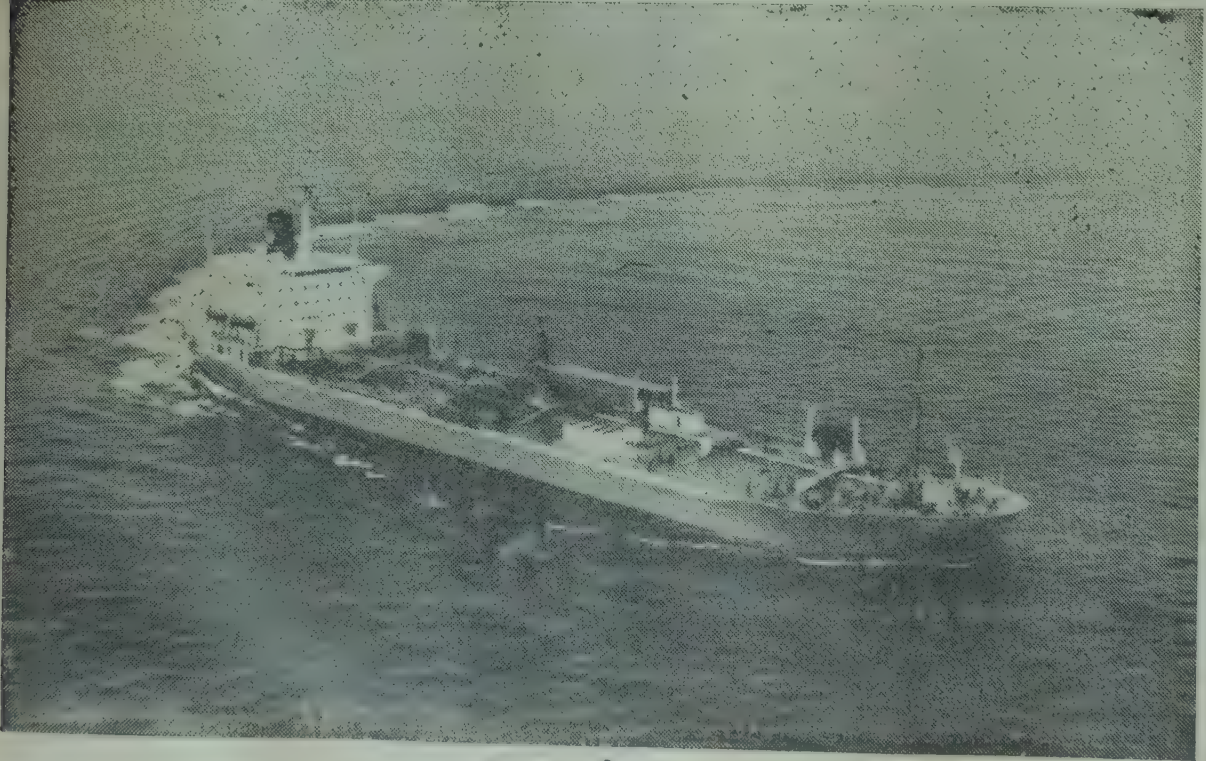
SCI had realised that the major growth areas for India's exports would be Africa and South-East Asia in future. Therefore, it had started a container service to some West African countries like Nigeria, Ghana, Republic of Benin, Republic of Senegal and the Ivory Coast in December 1980. The SCI also started operating a regular container service to Mauritius and East African countries from August 1981.

In keeping with requirements the SCI today handled a large number of containers — 5522 (TEUs) containers per day against 1085 (TEUs) containers in 1979. To suit national requirements it had also acquired 21 bulk carriers ranging in size from 18,000 dwt to 1,29,000 dwt in a short period. To serve India's oil industry, SCI had acquired a fleet of 24 tankers totalling 1.81 million dwt. SCI tankers today maintain an uninterrupted supply of crude oil to various Indian refineries and also ensure regular movement of petroleum products along the coast.

Indian shipping also entered the era of VLCC operations with the berthing of SCI's very large crude carrier, *Kanchenjunga* at the single buoy mooring at Vadinar off Jamnagar coast in March 1981, for discharging 2,25,000 tonnes of crude oil for the Koyali and Mathura refineries. Because of the growing complex nature of India's trade, SCI had acquired a few combination carriers ranging from 22,000 dwt to 1,23,000 dwt.

Outlining SCI's support to indigenous shipbuilding, Vice Admiral Gandhi said, the SCI had ordered and acquired 27 cargo liners from Hindustan Shipyard, Visakhapatnam, and two passenger ships from Mazagon Dock, Bombay. The SCI was also the first Indian shipping line to order a bulk carrier from Cochin shipyard. It acquired m.v. 'Rani Padmini' of 77,000 dwt in July 1981.

Referring to the SCI's profits, Vice Admiral Gandhi said, the SCI's net profits at the end of March 31, 1981 were Rs 17 crores. Only the company was loosing upward of Rs 50 lakhs every month at Bombay port due to congestion. He said, the SCI today had an investment of over Rs 1,043 crores. Since its inception it had helped save the national exchequer foreign exchange worth Rs 1330.5 crores.



Mt C. V. Raman, a medium type tanker of Shipping Corporation of India.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on Aug. 10, 1981)

	High	Low	T.T.
Australian $	6 65	6.58	6.8460
Belgium Franc (100)	14.20	13.00	14.525
British £	10.85	10.55	10 660
Burmese Kyat (100)	25.00	15.00	
Canadian $	4.79	4.71	4.8550
French N.F.	0 995	0.96	98.95
Indian Rupee (100)	57.00	53.00	66.15
West German DM	2.37	2.31	2.3815
Indonesian Rupiah (100)	0.88	0.78	
Italian Lira (100)	5.00	4.70	
Japanese Yen (100)	2.52	2.42	2.5710
Korean Won (100)	0.88	0.78	
Malaysian $	2.49	2.44	2.5400
Netherlands Guilder	2.14	2.09	2.1445
New Zealand $	4.85	4.65	4.7650
Pakistan Rupee (100)	4.30	3.80	6.160
Philippine Peso	0.705	0.67	0.7660
Singapore $	2.72	2.67	2.7755
South African Rand	5.60	5.20	6 2850
Sri Lanka Rs. (100)	30.00	22.00	
Swiss Franc	2.73	2.66	2.7615
Taiwan $ (100)	15.00	14.60	
Thai Baht (100)	27.50	25.50	

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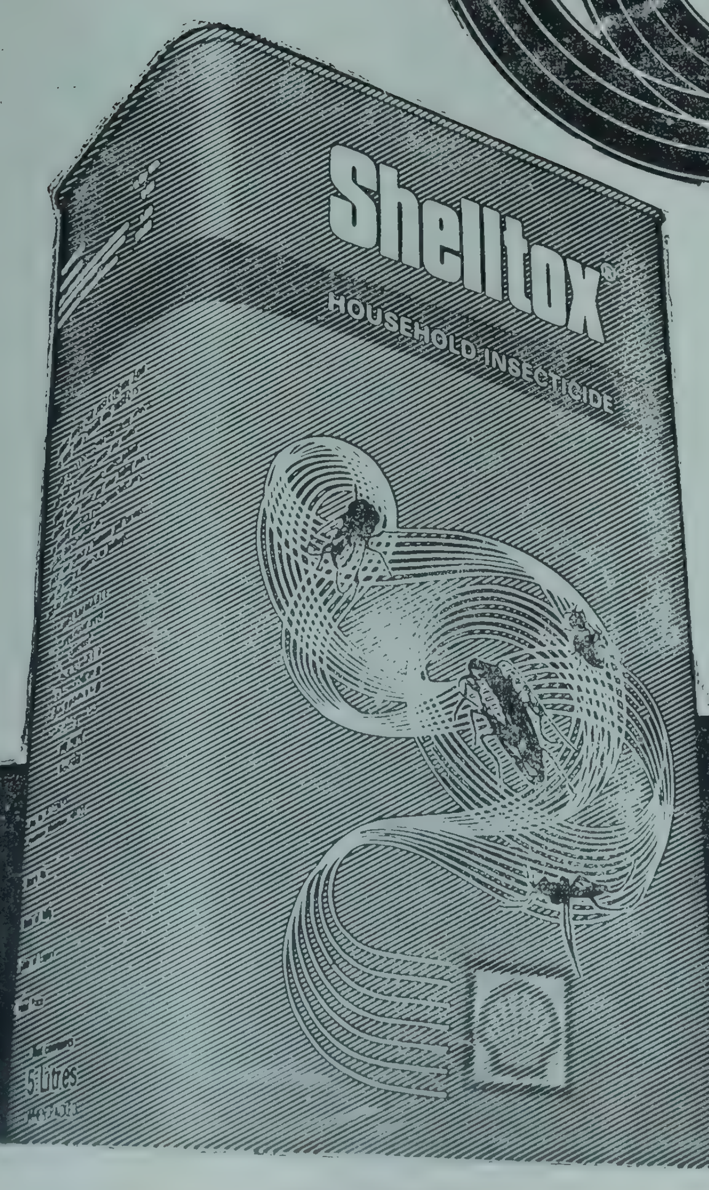

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TISCO

Rising input costs

BOMBAY

THE Tata Iron and Steel Co is going in for a two phase expansion programme. The first phase will cost Rs 200 crores and the next phase an additional Rs 200 crores. For the first phase of expansion the company will raise Rs 100 crores from the Steel Development Fund and Rs 25 crores from financial institutions.

Presiding over the seventy-fourth annual general meeting of TISCO, the chairman, Mr J. R. D. Tata said the first phase of expansion would result in an increased capacity of 200,000 tonnes of liquid steel. Mr Tata had pleaded with the Government that the Steel Development Fund should be used only for modernisation and consequential expansion, and not for cost escalation he said. The Steel Development Fund was expected to grow by Rs 350 crores a year with the 14 per cent interest rate the Government charged its users. With the fund growing at that rate it would soon have much more than the steel plants needed for modernisation, Mr Tata has, therefore, pleaded with the Government to reduce the contribution requirement to the fund or to find some other way whereby the company did not have to put such a large amount into the fund. The contribution requirement which was Rs 600 per tonne amounted to Rs 90 crores for TISCO.

Reviewing the performance in the first four months of 1981-82, Mr Tata said production was 40,000 tonnes more than that during the same period of 1980-81. Receipts for the period were Rs 198 crores against Rs 133 crores. This period's performance was influenced by substantial changes that took place towards the end of the last working year. On February 9, the Government announced a 20 per cent increase in the prices of controlled items. The increase which worked out to Rs 400 to Rs 500 per tonne for controlled items applied to 1.1 million tonnes of production by TISCO. On February 24, the Government took a bold decision and announced decontrol of billets and bars, which in the case of TISCO account for 40 per cent of turnover. As things are, from that date, only about 29 to 30 per cent of TISCO's output *viz*, flat products, rails, structurals and tin bars comes under the price control. There has thus been a substantial increase in revenues from sales of 40 per cent of steel. But, while the company's

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As I see it

Plight of a public sector unit

THE National Buildings Organisation (NBO) set up two plants — one for the production of dry hydrated lime (60 tonnes per day) and the other for clay pozzolona (reactive surkhi — capacity 20 tonnes per day) at Sultanpur, Delhi at a cost of Rs 16.73 lakhs. Although the plants were commissioned in March 1976, actual production could be undertaken only nine months later, in December 1976, on account of the delay in making arrangements for power supply by the Delhi Electric Supply Undertaking (DESU) and the delay in standardisation of parameters like limestone to coal ratio and time temperature effects. Right from the start the production of dust lime per tonne of limestone was lower than earlier estimated thus vitiating the cost estimates. As against an estimated cost of production of dry hydrated lime of Rs 127 per tonne the actual cost turned out to be Rs 759 per tonne during 1977-78. The actual cost of production (Rs 1,029 per tonne during 1977-78) of clay pozzolana deviated even more from the earlier estimated cost of production of Rs 80 per tonne. In the following year there was a reduction in the cost of production of both the items but the cost still fell short of the selling prices so that by the end of March 1979 there was a net loss of Rs 13.67 lakhs.

Before deciding on setting up the unit the potential annual demand for dry hydrated lime was assessed at about 20,000 tonnes and it was thought that NBO's production could be fully utilised by the three principal construction agencies in Delhi, *viz,* the Delhi Development Authority (DDA), the Central Public Works Department (CPWD) and Delhi Administration. However, in fact CPWD took only 15.28 tonnes and DDA took only 17.5 tonnes. The new product did not find favour because of its higher cost and some other problems. Moreover, the product was fit for use only for the construction of single storey or double storeyed building and was unsuitable for use in multi-storeyed buildings, to the construction of which the CPWD and DDA had since turned. The decision was taken to close down the plant from May 1980.

Apparently the dry hydrated lime and clay pozzolona produced by the plant of NBO were of better quality than those available in the market, according to the results of comprehensive testing undertaken at the Central Buildings Research Institute. The demonstrations organised by NBO had impressed the state-level functionaries so much that the NBO was called upon to instal two captive plants in Madhya Pradesh and one in Srinagar (Jammu & Kashmir). At the instance of Karnataka Housing Board NBO prepared a feasibility report for setting up three similar dry hydrated lime plants in Karnataka. Similarly NBO was reportedly preparing another feasibility report for setting up a plant of a similar nature in Himachal Pradesh. Notwithstanding all this, the NBO's initiative to persuade the Government of Haryana to run the NBO's own plants as managing agent bore no fruit and the Directorate-General of Supplies and Disposals also failed to find a purchaser for the unit so that efforts were being made to persuade the CPWD to take over the NBO plant, which has been disfavoured by the Public Accounts Committee.

The Public Accounts Committee (1980-81) of the Seventh Lok Sabha in its fortysecond report has, not unexpectedly, deplored the entire exercise as an example, which indicated "how wrong planning can bring bad name to the Government and also the governmental agencies which are entrusted with the work of executing such schemes". The Committee has called upon the Government "to undertake an enquiry into the whole case, right from the proposal stage to the closure of the plant so as to fix responsibility on the officials who were directly or indirectly responsible for the various deficiencies..."

Subhash Chandra Sarker

Money

Diversionary tactics

THE suggested bifurcation of the Life Insurance Corporation into regional corporations has been the starting point of a fresh round of discussions on reorganisation of the banking structure. How many banks? How many of them at national and regional levels? Should they compete with each other or be complementary? Should we have a few all-India giants with a vast network like the State Bank of India or should we opt for small local banks in the districts and blocks and villages ?

All these issues are really besides the point. And their major disadvantage is that they help to cover up the really significant and vital issues in banking that require immediate and sustained attention—how to bring about simplicity and economy in banking operations ? In all areas, even the simplest ones, procedures and practices have become so complicated and cumbersome that they defeat their own purpose. Some banks have introduced mechanised accounting at their major branches and some others are battling with their unions for doing so. These mechanised systems have not solved the main problem of giving statements to customers, but created many more and much more complicated problems of the mechanised system itself. Thus, a system that was specifically created to solve the problems of writing ledgers and giving statements has, far from solving those problems created many more problems in the system itself.

In the meanwhile at thousands of branches throughout the country, three simple problems of elementary banking are shelved. No one cares about giving a customer a statement of his account or pass-book just when he needs or asks. Similarly, despite their financial ingenuity, bankers are unable to collect local clearing cheques within 24 hours or outstation collection of bills and cheques within eight or ten days. Even the bankers themselves agree that these three tasks of passbooks, clearing and collection require very elementary banking or administrative skills.

The trouble with reorganisation and diversification movement is that it will create its own problems of adjustment and merger—they will be so vast that bankers will have another excuse for at least five years not to deal with the simple and elementary problems of good customer service.

There is an even more elementary problem of cash. Banks handle more cash than they have storage or handling capacity. They receive more cash than they pay, just as many branches have more staff than chairs. Even the Reserve Bank has similar cash problems. They print more notes in a year than they can destroy in a week or a month. The result is that allround there is more cash than the banking system can handle, store or destroy.

Bankers themeselves add new dimensions to this 'impossible' problem. Their clearing and collection and practices and delays force their customers to draw cash from one bank and immediately pay it into another bank for retiring hundis. Delays in issuing drafts and pay orders lead to further handling of cash. Clearing timings also lead to cash movements from account to account, area to area, even city to city to finance kite flying by customers. Yet bankers are unaware of what is going on.

Apart from increasing their efficiency and quality of service in these areas, there is only one solution to this cash problem—to have currency chest mechanism at every one of the 5,000 block level headquarters in the country. This is one of the finest, most efficient and economical mechanisms for handling remittances of cash in a vast country like India, that the government had invented 200 years ago. It still has the same potential. But during the last five years, the RBI had planned for 500 currency chests only and bankers could open less than 300. Bankers are lost incalculating costs of building and running a chest, not realising that saving in interest costs alone will more than finance these capital and revenue costs.

S. G. Shah

profits would increase substantially, this year, input costs would also go up, they went up by Rs 256 per tonne last year. Mr Tata expected sales to rise to Rs 700 crores during the current year as against Rs 521 crores in 1980-81.

Mr Tata announced that Indian Tube Company had become a subsidiary of TISCO. TISCO had agreed to buy British Steel Corporation's holding in Indian Tube Co. Pending the clearance of this by the Government, British Steel Corporation had agreed to allow TISCO to appoint directors to the company.

Mr Tata also announced that 14½ per cent interest would be paid alike on convertible bonds and preference shares, when the dividend exceeds 13½ per cent. In a vulnerable, controlled industry, TISCO should go increasingly towards specialisation and value added products, he said. TISCO also expected to get an industrial license soon for producing 90,000 tonnes of sponge iron a year in partnership with the Orissa Government.

The total turnover of the company at Rs 521 crores was higher than in the previous year by 14 per cent. The company's growing requirement for working capital is proposed to be met by raising long-term funds in the form of convertible bonds of Rs 30 crores. The proposed bond issue will be in the form of a rights-cum-public issue.

ENGINEERING EXPORTS

Uncertainties over?

BOMBAY

THE Engineering Export Promotion Council has held an impressive array of functions to celebrate its silver jubilee in New Delhi on August 17 and 18. The President, Mr Neelam Sanjiva Reddy, is inaugurated the silver jubilee function, while the Union Commerce Minister, Mr Pranab Kumar Mukherjee, inaugurated a seminar on export strategy in the '80s. The council has prepared an exhaustive paper on the subject with special emphasis on fifteen selected countries — USA, West Germany, France, Indonesia, Malaysia, Sri Lanka, Iran, Iraq, Saudi Arabia, Libya, Ivory Coast, Nigeria, Kenya, Tanzania and Zimbabwe. These countries would account for nearly Rs 6,000 crores of engineering exports by the end of the decade.

Mr G. D. Shah, chairman, EEPC, said that the council had been set up at a time when there was a general inhibition born of 200 years of foreign domination that India would not be able to export engineering goods in the face of competition from highly industrialised countries. Nevertheless, engineering exports rose from a mere Rs 5 crores in 1955-56 to Rs 900 crores in 1980-81. Exports consisted of simple steel based items in 1955. Today, capital goods account for 38 per cent of exports. Exports to neighbouring countries in Asia and Africa, which constituted 96 per cent of exports in 1956-57, have fallen to 70 per cent. About 28 per cent of our engineering exports today go to the developed countries of Europe and America.

Mr Shah said that EEPC had planned to reach the Rs 9,000 crore mark by 1990-91. A thrust would be given to capital goods exports and project exports which would together account for 50 per cent of exports, *i.e.* Rs 4,500 crores, by then.

Despite Mr Shah's claims for the past two decades, the engineering industry has not been pushing up its exports as hoped for in the past few years. The industry's performance was lack-lustre in 1979-80 with only Rs 650 crores of exports against Rs 717 crores in 1978-79. In 1980-81, there was a nominal recovery to Rs 900 crores. EEPC's target for the current financial year is Rs 1,150 crores. The attainment of this target is doubtful because of protectionist barriers raised in the US and EEC against Third World manufactures, shipping difficulties at Indian ports, and big power cuts in certain states. In fact, the industry lost contracts worth Rs 200 to Rs 250 crores in the last three months because of uncertainties in steel prices. Domestic steel prices were raised in February.

The air has now been cleared on this count. The Government has decided not only to accord full price protection to export contracts entered into before February 9, 1981, but also to supply steel to engineering export units at international prices. Domestic prices of steel are higher by Rs 2,000 per tonne compared to international prices. This will give the required price support to engineering export units.

The EEPC is now concentrating on another major promising area for engineering exports — subcontracting. The engineering giants of France and Belgium are keen on associating Indian industry in sub-contracting in West Asia. The council is, therefore, holding some major promotional programmes in the current financial year. They include a symposium in Belgium in September on Indo-Belgium trade and industrial co-operation, a follow-up conference for European contractors in India in Novem-

Continued on page 365

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	July 25 1981	July 18 1981	June 27 1981	July 26 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products	274.1	273.8	274.9	265.2	—0.1	—0.3	3.4	30.6
Primary articles	270.5	269.4	259.4	235.2	0.4	4.3	15.0	30.4
Fuel, power, lubricants etc.	428.7	427.4	400.5	355.1	0.3	7.0	20.7	58.4
All commodities	285.7	285.0	279.1	260.3	0.2	2.4	9.8	33.5

Money and Banking (Rs crores)

	During the week ended				Percentage variation			
	July 31 1981	July 24 1981	June 3 1981	Aug. 1 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,558	58,049	58,060	48,957	0.9	0.9	19.6	38.6
Bank credit	26,779	26,778	26,556	22,152	—	0.8	20.9	37.3
Aggregate deposits ..	40,612	40,578	40,169	33,610	0.1	1.1	20.8	41.6
Foreign exchange reserves(a)	4,877	4,877	4,877	5,111	—	—	—4.6	—14.2

MONTHLY INDICATORS

	Latest month				Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month		Amount/ Index			
Industrial production (crude Index)	1970=100	June	1981	145 9	145.5	0.3	5.7
Exports	Rs. crores	May	1981	383	627	—38.2	—15.7
Imports	Rs crores	May	1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May	1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	June	1981	4,877	5,045	—3.3	—6.9
Wholesale price Index ..	1970-71=100	June	1981	278.3	276.6	0.6	14.8
Consumer price Index for Industrial workers ..	1960=100	May	1981	433	427	1.4	13.6
Unemployment (lakhs) (d)		Feb.	1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110.9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3	15.2
Imports	Rs crores	12,210	8,908	2,955	37	27.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)..*	Rs crores	55,229	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.6	217.1	139.7	17.8	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)** (lakhs) ..		162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

CORPORATE SECTOR

In the market

East India Hotels

The East India Hotels Ltd (Registered Office : 4 Mangoe Lane, Calcutta-700 001), is entering the capital market on August 31, 1981 with a unique public issue of secured convertible cumulative debentures of Rs 3 crores. Giving details of the scheme at a press conference, Mr M. S. Oberoi, chairman of the company said that the debentures will be convertible into equity shares to the extent of 20 per cent at the end of the third year from the date of allotment. Interest will be accumulated every year compounded on a half-yearly basis and will be payable from the end of the seventh year onwards. Investors will earn an effective rate of interest of 13.96 per cent per annum. An investor investing Rs 10,000 in these debentures could this earn Rs 30,000 at the end of seven years.

The return on investment by way of interest alone will average 23.55 per cent per annum on the life of the debentures on reducing balances. If a debenture holder decides to sell the equity shares acquired as a result of conversion on the basis of the present market prices of the shares and taking into consideration the appreciation in value, the aggregate return to the investor could be over 30 per cent.

Reviewing the performance of the East India Hotels Limited, Mr Oberoi said, for the year ended March 31, 1981, the company achieved a record profit of Rs 7.12 crores before tax. The company has had an excellent dividend record, the average dividend being over 22 per cent for the last three years. The company's hotels enjoyed high occupancies from 1976-77 to 1980-81. Sales increased from Rs 17.65 crores to Rs 32.77 crores.

The proceeds of the debenture issue will be used to strengthen the capital base of the company. It will be mainly utilised to finance expansion of Hotel Oberoi Towers at Bombay by 192 rooms to meet the increasing demand for hotel rooms. The construction work has already been completed and the entire expansion will be completed by October 1981.

The company has also on anvil implementation of new hotel projects in Jaipur, Bhubhaneshwar, Bangalore, Hyderabad, Agra, Cochin and Goa.

Other developments

Dhrangadhra Chemical Works: Turnover up

Turnover of Dhrangadhra Chemical Works Ltd for the year ended March 1981 increased to Rs 35.43 crores from Rs 26.25 crores in the previous year. The net profit, after providing Rs 88.95 lakhs (Rs 74.74 lakhs) for depreciation and Rs 1.50 crores (Rs 30 lakhs) for taxation, amounted to Rs 1.13 crores (Rs 69.48 lakhs). The equity dividend recommended for the year under review is 15 per cent (12 per cent). An amount of Rs 10.43 lakhs (Rs 32.52 lakhs) is tansferred to investment allowance reserve and Rs 50 lakhs (Rs 2 lakhs) to general reserve. Production of soda ash during the year under review was 61,001 tonnes (49,743 tonnes).

Mafatlal Engineering: All-round improvement

Mafatlal Engineering Industries Ltd will spend Rs 45 crores to Rs 50 crores on modernisation over the next four to five years and has got a licence to make shuttleless looms. Announcing this at the company's 33rd annual general meeting, chairman, Mr Arvind Mafatlal, said there was an all-round improvement in production and turnover in the year 1980-81. Production of ring frames, draw frames, fly frames and high production cards reached an all time record. At the end of March 1981, the value of outstanding orders was Rs 160 crores. The in-flow of orders continued to be satisfactory and a further increase in production was planned for 1981-82.

Export orders worth Rs 162.76 lakhs were booked during the year. In addition, the company earned foreign exchange worth US $1,22,500 by way of fees for rendering technical and management services to a textile process house in Sudan.

Mr Mafatlal reported that the greatest disturbing factor during the year was the unprecedented rise in prices which neutralised gains in profitability. Personnel costs also increased substantially as a result of spiralling increase in the cost of living index. The company also entered into a wage settlement with the recognised union at Kalwe in January 1981. The new settlement became effective from September 1, 1979, resulting in a substantial amount payable by way of arrears of wages.

Mr Mafatlal said, the company had completed the first phase of modernisation and replacement programme and had fully utilised loans aggregating Rs 200 lakhs from IDBI, IFCI and ICICI under the soft loan scheme. The second phase of modernisation and the replacement programme involving a capital expenditure of Rs 900 lakhs had been worked out. ICICI, IDBI and IFCI had sanctioned loans to the extent of Rs 620 lakhs. The balance amount of Rs 280 lakhs would be financed from the company's own sources. The company had already availed of Rs 241.86 lakhs out of the sanctioned loans of Rs 620 lakhs.

Estrela Batteries: Trying to revive

Estrela Batteries Ltd, which has been facing severe financial and labour problems and is almost a sick unit, expects to improve its performance now that its new management has reached a long-term productivity agreement with its workers' union. The company manufactures dry cells for various applications and has been in the field for 40 years.

Modi Alkalies: Progress report

Modi Alkalies and Chemicals Ltd, a Modi group company, has made some headway on implementation of its project at Alwar (Rajasthan) for the manufacture of 37,060 tonnes per annum of caustic soda, 19,800 tonnes per annum of hydrochloric acid, 20,460 tonnes per annum of liquid chlorine and 10,000 tonnes per annum of stable bleaching powder. Mr Y. K. Modi, vice-chairman and managing director of the company, told newsmen in Bombay that orders for machinery worth about Rs 8 crores had already been placed out of total equipment requirement of Rs 18 crores and balance orders would be finalised in the next few months. Erection of the plant and machinery was scheduled to be completed by January 1983 and commercial production could start in the following March.

The plant will be using the West German mercury cell process which assures big savings in energy and also lower loss of mercury. The plant would also incorporate facility for switching over from graphite anodes to dimensionally stable anodes with a view to further improving its capacity and reducing power consumption Mr Modi expected production cost at the plant to be lower by Rs 300 to 400 per tonne compared to other plants making similar products.

The project was expected to cost Rs 26.70 crores and to partly finance the scheme the company intended to come out some time in December this year with a public issue of Rs 3.41 crores out of the total equity capital of Rs 8.75 crores. The balance of the project cost was to be met from term loans of Rs 17.80 crores from financial institutions and banks, and central subsidy of Rs 15 lakhs.

Cooptex: Ambitious sales target

The Tamil Nadu Handloom Weavers' Cooperative Society (Cooptex) has fixed a revised sales target of Rs 75 crores (as against original target of Rs 45 crores) for 1981-82 and has planned to achieve this ambitious target through various measures regionwise, productwise and channelwise. According to Tamil Nadu Minister for Handlooms, Mr Rajendran, Cooptex has planned to increase the production of janata varieties to 40 million square metres to meet the varietal needs from all over the country. Cooptex will concentrate on production of varieties suited to metropolitan markets of Bombay, New Delhi and Calcutta and also exploit the potential markets like Gujarat. Cooptex hopes to contact the handloom development corporations of various States including Gujarat, UP, Orissa and Bihar for distribution of Janata varieties through their marketing outlets.

Besides designing new designs Cooptex has collected national designs as part of its marketing strategy. Sarees included in the collection have been designed and printed to cater to needs of higher income groups. Cooptex also plans to purchase varieties produced in other States and market them through Cooptex showrooms. The export target for 1981-82 is Rs 4 crores.

Indian Cable: Sales up

The Indian Cable Company Limited (INCAB) achieved sales of Rs 53.61 crores during the year ended March 31, 1981 against Rs 47.27 crores in the previous year representing an increase of 13 per cent. Crippling power shortage at Jamshedpur and financial stringency aggravated operational problems. Profit after tax for the year was Rs 1.62 crores (Rs 1.17 crores) while, depreciation absorbed Rs 67 lakhs (Rs 68 lakhs). Transfer to investment allowance reserve absorbed Rs 4 lakhs. The board of directors recommended a dividend of 17 per cent amounting to Rs 1.07 crores as against 14 per cent last year. The company's new project at its Pune works to manufacture 800 km of PVC power cable per annum is nearing completion and is expected to start commercial production during the current financial year.

Machinery Manufacturers Corporation: Sales, profits up

Sales of Machinery Manufacturers Corporation Limited for the year ended March 1981 increased to Rs 25.60 crores from Rs 16.21 crores in the previous year. The net profit, after providing Rs 62.73 lakhs (Rs 38.92 lakhs) for depreciation, Rs 1.24 crores (Rs 1.25 crores) for interest payments and Rs 11 lakhs (Rs 11.25 lakhs) for taxation, amounted to Rs 93.38 lakhs (Rs 34.38 lakhs). The equity dividend recommended for the year under review is 12.5 per cent. An amount of Rs 23.94 lakhs (Rs 15.72 lakhs) is transferred to investment allowances reserve and Rs 50 lakhs (nil) to general reserve. Orders in hand as on March 31, 1981 were Rs 89.26 crores. In the company's Calcutta factory, an amount of Rs 1.40 crores has been spent on the modernisation of the plant and equipment.

Colour-Chem pays 15 per cent

Sales of Colour-Chem Ltd for the year ended March 1981 increased to Rs 50.07 crores from Rs 44.20 crores in the previous year. The net profit, after providing Rs 2.20 crores (Rs 2.16 crores) for depreciation and Rs 2.57 crores (Rs 2.20 crores) for taxation, was Rs 2.09 crores (Rs 2.12 crores). The equity dividend recommended for the year under review is 15 per cent (12 per cent). An amount of Rs 22 lakhs (Rs 51 lakhs) is transferred to investment allowance reserve and Rs 20 lakhs (Rs 76.73 lakhs) to general reserve.

Zenith Steel Pipes to diversify

Zenith Steel Pipes and Industries Ltd has reported higher sales for the year ended April 1981 at Rs 52.69 crores compared to Rs 39.93 crores in the previous year. The net profit, after providing Rs 58.23 lakhs (Rs 54.09 lakhs) for depreciation and Rs 90 lakhs (Rs 42 lakhs) for taxation, amounted to Rs 1.77 crores (Rs 1.44 crores). The equity dividend recommended for the year under review is 20 per cent. An amount of Rs 20.70 lakhs (Rs 68.07 lakhs) is transferred to investment allowance reserve and Rs 1.17 crores (Rs 32.41 lakhs) to general reserve. The total fob value of pipes exported during the year under review was Rs 10.55 crores. During the year under review, an industrial licence has been received for the manufacture of writing and printing paper up to 19,800 tonnes per annum. The plant is located at Bana Fateha a backward area in Hoshiarpur district of Punjab. A letter of intent for manufacture of portland cement up to five lakh tonnes per annum has been received by the company. A letter of registration from DGTD has been received for the manufacture of beta naphthol with an annual capacity of 1,000 tonnes.

Forthcoming company meetings

AUGUST 22 TO AUGUST 28

DALMIA CEMENT (BHARAT) LTD, Dalmiapuram, Tiruchirapalli, Tamil Nadu. (*August* 22, 11 *a.m.*)

STAR TEXTILE ENGINEERING WORKS LTD, M. C. Ghia Hall, Hargovindas Building, K. Dubash Marg, Bombay-400 023. (*August* 24, 4 *p.m.*)

THE INVESTMENT CORPORATION OF INDIA LTD, Bombay House, Homi Modi Street, Fort, Bombay-400 023. (*August* 25, 4 *p.m.*)

UNIVERSAL CABLES LTD, Birla Vikas, Satna (MP), MP. (*August* 26, 3 *p.m.*)

HINDOOSTAN SPG. & WVG. MILLS LTD, Patkar Hall, Thackersey Marg, Bombay-400 020. (*August* 27, 4 *p.m.*)

HINDUSTAN MOTORS LTD, Birla Building, 9/1, R. N. Mukherjee Road, Calcutta-700 001. (*August* 27, 3 *p.m.*)

INDIAN HOTELS CO LTD, Taj Mahal Hotel, Apollo Bunder, Bombay-400 039. (*August* 27, 4 *p.m.*)

NEOMER LTD, Hall of Alembic Chemical Works Co Ltd, Alembic Road, Baroda-390 003. (*August* 27, 4 *p.m.*)

JAY ENGINEERING WORKS LTD, Ashok Hotel, New Delhi-110 001. (*August* 28, 4.30 *p.m.*)

LARSEN & TOUBRO LTD, Birla Matushri Sabhagar, 19, Marine Lines, Bombay-400 020. (*August* 28, 4 *p.m.*)

KALASA TEA AND PRODUCE COMPANY, LTD, 6/117, Race Course Road, Coimbatore-641 018 (TN). (*August* 28, 11.45 *a.m.*)

PESTICIDES AND BREWERS LTD, 138-141, Government Industrial Estate, Kandivli (West), Bombay-400 067. (*August* 28, 3 *p.m.*)

SIMTOOLS LTD, Auditorium of the Training School of Voltas Ltd, 2nd Pokhran Road, Thane-400 601. (*August* 28, 10.30 *a.m.*)

PAPER & PULP CONVERSIONS LTD, Kasturbai Mangal Karyalaya, Ganeshkhind Road, Pune-411 005. (*August* 28, 3 *p.m.*)

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Adarsh Chemicals & Fertilizers		Coromandel Fertilisers		Dharamsi Morarji Chemical Company		Gujarat State Fertilizers Co.		Mangalore Chemicals & Fertilizers	
Industry Group	Fertilisers		Fertilisers		Fertilisers		Fertilisers		Fertilisers	
	Year ended December		Year ended December		Year ended December		Year ended December		Year ended December	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	244.6	254.3	3,889.6	4,035.3	1,032.2	1,100.6	8,569.1	8,878.3	–31.6	–189.2
(i) Paid-up capital (a+b)	110.8	110.8	1,533.1	1,533.1	642.4	642.4	1,499.5	1,599.6	1,541.1	1,541.4
(a) Equity	85.8	85.8	1,533.1	1,533.1	642.4	642.4	1,199.7	1,599.6	1,241.2	1,241.5
(b) Preference	25.0	25.0	—	—	—	—	299.8	—	299.9	299.9
(ii) Reserves	113.8	143.5	2,356.5	2,502.2	389.8	458.2	7,069.6	7,278.7	–1,572.7	–1,730.6
2. Borrowings (i+ii)	177.0	253.6	279.3	329.4	215.7	425.8	1,226.0	3,164.0	6,486.2	6,106.9
(i) Long-term	113.7	98.8	279.3	279.3	74 4	111.3	583.4	751.5	6,178.7	6,099.4
(ii) Short-term	63.3	154.8	—	50.1	141.3	314.5	642.6	2,412.5	307.5	7.5
3. Non-current liabilities and provisions	2.1	—	—	—	9.5	12.4	—	—	—	—
4. Current liabilities and provisions	69.8	65.1	980.6	1,113.0	705.9	722.5	4,148.1	4,281.1	1,377.2	2,353.8
Assets (at the end of the year)										
5. Gross fixed assets	408.5	469.7	5,779.9	6,040.6	1,402.6	1,542.2	12,491.5	14,013.0	7,095.8	7,169.9
6. Less depreciation	131.7	159.1	4,520.1	4,612.8	798.0	935.9	7,505.9	8,119.3	2,350.0	2,972.2
7. Net fixed assets (5—6)	276.8	310.6	1,259.8	1,427.8	604.6	606.3	4,985.6	5,893.7	4,745.8	4,197.7
8. Current assets (i+ii+iii)	216.6	262.3	3,869.9	4,032.1	1,262.3	1,557.0	7,602.8	8,499.9	3,030.9	4,003.6
(i) Inventories	159.2	224.4	1,211.8	1,387.4	555.4	609.3	3,575.5	4.550.9	1,915.5	2,927.2
(ii) Receivables and loans and advances	44.0	31.7	2 348.9	2,463.2	632.2	870.6	1,955.7	3,437.5	1,101.2	810.0
(iii) Others	13.4	6.2	309.2	181.5	74.7	77.1	2,071.6	511.5	14.2	266.4
9. Other assets	0.1	0.1	19.8	17.8	96.4	98.0	1,354.8	1,929.8	55.1	70.2
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**493.5**	**573.0**	**5,149.5**	**5,477.7**	**1,963.3**	**2,261.3**	**13,943.2**	**16,323.4**	**7,831.8**	**8,271.5**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	515.0	550.8	4,507.8	5,835.0	2,925.0	3,854.2	10,641.0	10,815.2	5,813.8	6,509.4
11. Increase in stock of finished goods and work in progress	18.8	67.1	23.3	43.1	56.0	0.8	–716.8	1,102.0	703.3	743.2
12. Value of production (10+11)	533.8	617.9	4,531.1	5,878.1	2,981.0	3,855.0	9,924.2	11,917.2	6,517.1	7,252.6
13. Other income	1.7	1.3	740.3	193.1	63.0	75.9	248.0	141.7	10.6	10.8
Expenditure										
14. Materials, stores and other mfg. expenses	350.3	460.9	3,421.1	4,133.8	1,993.6	2,604.4	5,950.2	8,101.8	3,512.0	4,780.6
15. Current repairs	21.4	27.5	171.5	187.2	120.2	161.9	458.3	417.8	126.9	145.9
16. Salaries and wages	34.8	36.3	246.2	276.1	287.2	371.9	634.8	630.2	121.1	144.4
17. Welfare expenses	2.9	3.3	28.8	29.0	20.7	33.7	77.5	55.9	10.5	13.3
18. Managerial remuneration	—	—	0.5	0.5	—	—	—	—	—	—
19. Other expenses	14.9	15.5	488.9	498.4	144.2	180.5	407.6	491.6	1,169.5	1,147.8
20. Depreciation	29.4	28.6	155.2	155.1	120.5	168.6	521.4	620.8	629.0	624.5
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	81.8	47.1	759.2	791.1	357.6	409.9	2,122.4	1,740.8	958.7	406.9
23. Interest	26.5	33.6	34.8	32.8	27.4	69.6	95.2	198.2	676.6	652.3
24. Tax provision	—	—	401.0	375.0	170.0	161.0	1,354.0	1,062.0	—	—
25. Profit after tax (22—23—24)	55.3	13.5	323.4	383.3	160.2	179.3	673.2	480.6	282.1	–245.4
Appropriations										
26. Dividends (i+ii)	15.4	11.1	306.6	306.6	102.8	115.6	291.8	358.9	—	—
(i) Equity	12.9	8.6	306.6	306.6	102.8	115.6	263.9	351.9	—	—
(ii) Preference	2.5	2.5	—	—	—	—	27.9	7.0	—	—
27. Profit retained (25—26)	39.9	2.4	16.8	76.7	57.4	63.7	381.4	121.7	282.1	–245.4
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**535.5**	**619.2**	**5,271.4**	**6,071.2**	**3,044.0**	**3,930.9**	**10,172.2**	**12,058.9**	**6,527.7**	**7,263.4**
Operational indicators (per cent)										
(a) Net worth/total net assets	49.6	44 4	75.5	73.7	52.6	48.7	61.5	54.4	..	..
(b) Inventories/net sales	30.9	40.7	26.9	23.8	19.0	15.8	33.6	42.1	32.9	45.0
(c) Operating profit/net sales	15.9	8.6	16.8	13.6	12.2	10.6	19.9	16.1	16.5	6.3
(d) Operating profit/total net assets	16.6	8.2	14.7	14.4	18.2	18.1	15.2	10.7	12.2	4.9
(e) Profit after tax/net worth	22.6	5.3	8.3	9.5	15.5	16.3	7.9	5.4	..	..
(f) Equity earning/equity capital	61.5	12.8	21.1	25.0	24.9	27.9	53.8	29.6	22.7	..
(g) Equity dividend	15.0	10.0	20.0	20.0	16.0	18.0	22.0	22.0	—	—
(h) Equity dividend coverage. (No. of times)	4.1	1.2	1.1	1.3	1.6	1.6	2.4	1.3	..	..
(i) Paid-up value per equity share (Rs.)	100.00	100.00	10.00	10.00	50.00	50.00	100.00	100.00	10.00	10.00
(j) Market price of an equity share (Rs.)	218.75	205.00	22.25	22.50	121.25	111.25	364.50	424.00	12.00	8.25
(k) Gross yield	6.9	4.9	9.0	8.9	6.6	8.1	6.0	5.2	..	..
(l) Gross fixed assets formation	3.9	15.0	2.6	4.5	14.5	10.0	17.5	12.2	0.9	1.0
(m) Debt/equity	0.46:1	0.39:1	0.07:1	0.07:1	0.07:1	0.10:1	0.07:1	0.08:1	..	..

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments made in other items also. Totals may not add

EQUITIES

Steady undertone

Bombay, August 17

After resuming on a better note, pivotals reacted modestly on profit-taking and lack of follow-up support at the improved rates. A few scrips, however, staged a recovery towards the end of the week on short-covering and replacement support. With gains and losses matching almost equally, the final price levels were again mixed.

The cautious attitude of marketmen is understandable in view of the start of the monsoon session of Parliament on August 17 and the possibility of further steps to curb the inflationary trend in the economy. Besides BSE imposed special additional deposit margins on 25 scrips (17 in the case of bulls and 8 in respect of bears) to arrest both excessive buying and heavy selling.

Century after an initial setback at Rs 805 rallied smartly to Rs 841 on reports that the proposed lock-out at its Kalyan plant on August 13 had been deferred following the State Government's intervention in the labour dispute. With scattered profit-taking, however, the scrip closed at Rs 837.50 with a net gain of Rs 24. After limited activity, Standard closed at Rs 553, with a nominal increase of one point.

Tata Mills, which was subdued earlier on rumours of Tatas unloading their equity holdings in the company, ruled steady in later dealings following the company's denial of such selling. Tata Steel suffered a sharp setback on fears of sharp erosion in the profitability of the company during the current year ending March 1982. The price was marked down from Rs 380 to Rs 334 before closing at Rs 349 with a net loss of 31 points.

After the recent reaction, PAL rallied again by 13 points to Rs 242 on influential buying. TELCO recorded an impressive increase by Rs 33 to Rs 656.

In the cash section, Ultramarine jumped by Rs 35 to Rs 420 on recommendation of a bonus issue in the ratio of one-for-two. The closing was, however, at Rs 400 because of profit-taking, showing a net gain of 15 points. Century Enka spurted by Rs 35 to Rs 710, Baroda Rayon by Rs 9 to Rs 339, S.I. Viscose by Rs 15 to Rs 272.50 and Dempo Steamships by Rs 10 to Rs 590. Indian Rayon crossed the Rs 100 mark, standing at Rs 102 before closing unchanged at Rs 97.

THE WEEK'S PRICE RANGE

(Compiled by
Commerce Research Bureau)

	Closing quotations 8-8-81	High	Low	Closing quotations 15-8-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	245.00	—	—	245.00*
Bombay Dyeing (25)	90.00	93.50	88.00	91.00
Central India (50)	62.00	65.00	60.00	62.00
Century (100)	813.50	841.00	805.00	837.50
Dawn (50)	73.00	75.00	70.00	70.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	112.50	112 50	108.00	112.50
Gokak (100)	207.00	204.00	202.00	203.00
Gwalior Rayon (10)	62.25cd	62.75cd	60.75xd	61.00xd
Khatau (100)	265.00	270.00	265.00	265.00
Kohinoor (100)	64.00	62.00	56.00	56.00
Morarjee (100)	245.00	250.00	245.00	250.00
National Rayon (100)	370.00	370.00	355.00	365.00
New Great Eastern (100)	90.00	93.00	90.00	93.00
Phoenix (100)	47.00*	—	—	47.00*
Podar (10)	8.00*	—	—	8.00*
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	71.00*	72.50	71.00	72.00
Standard (100)	552.00	560.00	550.00	553.00
Svadeshi (100)	172.00	172.00	165.00	168.00
Swan (100)	205.00	210.00	200.00	207.50
Tata Mills (25)	26.00	28.00	25.00	27.00
Electric				
Ahmedabad (100)	100.00	102.00	99.00	102.00
Andhra Valley (100)	148.00	149.00	148.00	148 00
B.Subarban(100)	122.50*	125.00	120.50	122.50
Tata Hydro (100)	150.00	150.00	148.00	149.00
Tata Power (100)	150.00	149.00	146.00	146.00
Steel				
Mukand (10)	27.25	29.50	27.00	29.50
Tata Steel (100)	367.00	384.00	334.00	349.00
Engineering				
Larsen & Toubro (10)	61.50	63.50	60.50	61.50
Tata Eng. & Loco (100	623.00	685.00	620.00	656.00
S.L.M. Maneklal (100)	198.75	200.00	195.00	195.00
Voltas (100)	205.00	204.00	200.00	202.00
Walchandnagar (100)	215.00	230.00	210.00	227.50
Dyes & Chem				
Amar Dye-Chem (100)	150.00	157.50	150.00	150.00
Indian Dyestuff (100)	247.00cd	250.00cd	235.00xd	242.00xd
Polychem (50)	70.00	72.00	69.00	72.00
Tata Chemical (10)	67.50	68.00	65.00	66.00
Shipping				
Great Eastern (10)	56.75	57.50	50.50	52.00
Scindia (20)	29.00	29.50	26.75	27.00
Cement				
A.C.C. (100)	152.00	155.00	142.00	145.00
Shree Digvijay (100)	165.00	165.00	157.50	160.00
Sugar				
Maharashtra (50)	53.00	53.00	52.00	53.00
Phaltan (50)	44.00	43.00	42.00	43.00
Miscellaneous				
Bombay Burmah (25)	44.50	45.50	44.50	45.50
Hindustan Motors (10)	29.35	29.75	28.50	29.00
Premier Automobiles (100)	229.00	249.00	230.00	242.00
Pre. Construction (50)	78.00	80.00	78.00	78.00
Sirpur Paper (10)	33.50	34.50	32.50	33.50
Tata Oil (25)	83.00cd	84.50cd	76.00xd	76.00xd
W. Coast Paper (100)	110.00	110.00	105.00	107.50
Wimco (10)	15.00	15.00	14.25	14.75
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	330.00	342.00	328.00	339.00
Century Enka (100)	675.00	725.00	700.00	710.00
Garware Nylons (10)	36.00	37.00	35.00	36.50
Gold Mohur (100)	98.00*	92.00	89.50	92.00
Indian Rayon (10)	97.00	102.00	94.00	97.00
J. K. Cotton (10)	18.50	18.75	18.75	18.75
J. K. Synthetics (10)	53.00	53.25	51.75	52.75
Lakshmi Vishnu (100)	56.00	56.00	55.00	55.00
Mafatlal Fine (100)	237.50	240.00	235.00	237.50
Mafatlal Industries (125)	390.00	387.50	383.75	387.50
Modella Woollen (10)	10.00	—	—	10.00*
Modipon (10)	67.00	—	—	67.00*
Nirlon (10)	65.50	66·75	63.50	65.00

	Closing quotations 8-8-81	High	Low	Closing quotations 15-8-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	55.50	61.00	56.75	59.00
Reliance Textile (10)	103.25	104.00	100 75	102.25
S. I. Viscose (100)	257.50	272.50	257.50	272.00
Stretch Fibres (10)	9.25	9.25	9.00	9.00
Swadeshi Polytex (10)	15.50	15.25	15.00	15.25
Electric				
Amalgamated (10)	7.50	—	—	7.50*
Surat (100) ...	99.00*	103.00	100.00	103.00
Cement				
Mysore Cement (10)	35.25	35.00	34.50	35.00
Saurashtra Cement (100)	110.00	—	—	110.00*
Paper				
Andhra Paper (100)	235.00*	—	—	235.00*
Bhadrachalam (10)	17.50	—	—	17.50*
Jayant Paper (100)	170.00*	170.00	162.50	165.00
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	36.00	35.00	35.00	35.00
Ferro Alloys (100)	280.00	285.00	277.50	285.00
Hind Aluminium (10)	57.50	58.00	54.00	55.00
Khandelwal Ferro (100)	130.00	132.50	127.50	130.00
Mahindra Ugine (10)	56.00	55.00	53.50	53.50
Tata Yodogawa (100)	130.00*	—	—	130.00*
Engineering				
Associated Bearings (100)	380.00	380.00	375.00	375.00
Bimetal Bearings (10) ...	42.00	42.00	41.00	42.00
Blue Star (10)	36.00	36.75	35.75	36.25
Elecon Engineering (100)	435.00*	—	—	435.00*
Gujarat Steel Tube (100)	670.00	680.00	660.00	670.00
Hindustan Brown (100)	305.00*	306.25	305.00	306.25
Ingersoll-Rand (10) ...	103.00	106.00	102.00	102.00
Jyoti (100)	251.25	275.00	252.50	265.00
Kirloskar Cummins (100)	550.00	547.50	542.50	545.00
Kirloskar Oils (10) ...	31.00	30.50	29.50	29.50
Kirloskar Pneumatic (10)	55.00	55.00	53.00	54.00
Mahindra (10)	57.00	57.50	53.50	56.00
New Standard (100) ...	132.50	130.00	127.00	130.00
Sandvik Asia (100) ...	340.00	—	—	340.00*
Vulcan-Laval (10) ...	34.50	34.00	33.25	34.50
Zenith Steel (10) ...	47.00	48.50	44.00	48.00
Cables & Elec.				
Asian Cables (100) ...	337.50cr	337.50cr	212.50xr	212.50xr
Bajaj Electricals (100) ...	205.00	202.50	200.00	202.50
Crompton Greaves (100)	380.00	380.00	370.00	372.50
Otis Elevator (10) ...	52.00	56.00	54.00	56.00
Siemens India (10) ...	54.00	55.50	53.50	54.00
Chemicals				
BASF (10)	60.00	60.00	58.00	58.00
Bayer (India) (100) ...	260.00	261.25	250.00	252.50
Chem & Fibres (10) ...	21.00	21.75	20.50	20.75
Colour-Chem (100) ...	210.00	217.50	207.50	212.50
German Remedies (10)	25.50	26.00	25.00	25.00
Gujarat State Fert. (100)	426.00	445.00	421.00	445.00
Hindustan Lever (10) ...	43.00	43.25	42.00	43.00
Indian Organic (100) ...	315.00	340.00	315.00	340.00
National Organic (100)	220.00	223.00	214.00	220.00
Pfizer (10)	25.50	26.50	25.25	26.25
Polyolefins Ind. (100) ...	305.00	300.00	297.50	297.50
Sandoz (10)	27.00	26.50	26.00	26.50
Synthetics (100) ...	103.00	107.00	101.00	101.00
Warner-Hindustan (10)	24.50	—	—	24.50*
Zuari Agro (10)... ...	27.50	27.50	26.00	27.00
Miscellaneous				
Bajaj Auto (100)	1,650.00	1,675.00	1,620.00	1,660.00
Bombay Oxygen (100)	117.50	120.00	115.00	115.00
Cadbury (10)	20.50	20.75	20.00	20.00
Camphor & Allied (100)	232.50	232.50	230.00	230.00
Ceat Tyres (100) ...	200.00	205.00	200.00	200.00
Colgate-Palmolive (10)	142.00	144.00	141.00	142.00
Empire Industries (15)	30.50	—	—	30.50
Fibre glass (10) ...	22 00	22.50	20.75	22.00
Gammon India (10) ...	22.50	23.00	22.00	22.75
Hindustan Ferodo (10)	40.00*	42 50	40.00	42.50
Hoechst Dyes (10) ...	26.50	26 50	26.00	26.50
Indian Hotels (10) ...	92.00	93.00	88.00	91.00
Motor Industries (100)	475.00	480.00	460.00	475.00
Tata-Finlay (10) ...	12.75	13.00	12.00	12.00

Notes: Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.
(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns
(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

Market Gossip

Costlier shipping loans?

THE Finance Ministry is reportedly toying with the idea of making the loans to the shipping industry from the Shipping Development Fund Committee (SDFC) costlier by 1½ to 2½ per cent. At present the SDFC charges an interest of 4½ per cent on these loans. The Finance Ministry is reportedly of the view that the loans are extra cheap and that there is no reason why such assistance should be made available to the shipping companies at rates at concessional rates than those that are given under the soft loan scheme for other industries. As expected the move has met with stiff resistance from the Ministry of Transport and Shipping. It is recognised by the Shipping Ministry that a major factor which has helped the shipping tonnage to grow has been the loans from the SDFC. This Ministry has also reportedly pointed out that Indian shipping companies are obliged to place orders on Indian shipyards whenever they go in for expansion. The shipping lines have to pay a price higher by 10 per cent than the international price of the ship because the Indian ships are costlier. It would seem to be the Shipping Ministry's argument that if the shipping companies have to shoulder this extra burden they should also get loans at concessional interest for their shipping expansion plans.

The Ministry of Finance would already seem to have decided that non-shipping MRTP companies which branch out into shipping should not be entitled to the loans from the SDFC. It has ruled out a suggestion from the Shipping Ministry that such loans could be considered for the non-shipping companies when they form a separate shipping company.

These reports have caused quite a lot of worry in the shipping industry. What worries them still more is that some bureaucrats in the Government of India are thinking of reserving 60 per cent of the shipping tonnage for the public sector and only 40 per cent for the private sector. This would mean that in the 10 million grt target fixed for 1990 the public sector tonnage would about 6 million and the private sector 4 million. It is not known how such a division will operate in the Sixth Plan period. Private sector companies are known to have placed orders in the last few months for about 2½ million dwt with the ships to be delivered before the Sixth Plan ends in 1985. If there is any truth in these reports, most of the private sector companies will find that they cannot undertake any expansion in the coming years.

Impounded public deposits for cotton units?

THE textile industry has suggested a novel way out of the stringency of funds it is facing in modernising itself. It has suggested to the Government to release the impounded public deposits of 10 per cent to the mills so that they could go ahead with their modernisation programmes. Under the Companies (Acceptance of Deposit) Act of 1975, non-banking and non-financial companies are required to deposit in banks or invest in specified securities a minimum of 10 per cent of public deposits maturing during the year ending on March 31. Further, in terms of section 40A (B) of the Income-tax Act 1961, 15 per cent by way of expenditure on public deposits is not treated as allowable expenditure to companies for tax purposes.

The Indian Cotton Mills Federation sources estimated that Rs 80 crores to Rs 85 crores had been collected by mills as deposits. If the Government releases the impounded public deposits of 10 per cent, funds to the extent of Rs 8 crores to Rs 8.5 crores will be released to the industry. For some units the unfreezing of 10 per cent of deposits would be a big relief for meeting working capital needs as also funds for modernisation.

According to ICMF currently the mills are engaged in implementing modernisation plans already taken on hand. During the last three years the industry has indeed ploughed back internal resources of over Rs 200 crores. As the current surplus has thus been reinvested towards promoters' contribution in modernisation schemes, there has been a further depletion in the working capital.

It was also claimed that the low profit profile of the textile industry as compared to others has been a stumbling block in the cotton mills industry's efforts at mobilising alternative sources of finance such as fresh equity, debentures or even public deposits. The interest on ceiling of 15 per cent on public deposits is another deterrent for the textile industry in particular. On top of it 15 per cent of the interest amount paid is disallowed under Income-tax act. The ICMF wants the Union Finance Ministry to treat the entire expenditure incurred towards interest payment on public deposit as allowable expenditure for purposes of corporate taxation.

Speculative market

THAT Dalal Street is still in the grip of speculators was evident from the behaviour of Tata Steel shares immediately after the TISCO annual general meeting was held on August 11 and where Mr J. R. D. Tata made a statement from which the market did not draw adequate encouragement. There was nothing discouraging in his speech either. What he said was that the sales output during the current year may touch Rs 700 crores, but that the profit margins were under pressure on account of rising costs. He also indicated that market demand for domestic steel was not as strong as it was so far because of large imports made. It maybe that the Government will take a hint from Mr Tata's speech and try to curtail imports as much as possible. But the speculators in the share market got busy immediately. Nervous liquidation followed and the price fell sharply from Rs 380 to Rs 325 before recovering to Rs 349. The drop in the Tata Steel shares also influenced the general market and the prices recorded a widespread retreat.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*August 17, 1981*	*A week ago*
Groundnut	*(Rajkot)*	550	550
Rapeseed	*(Kanpur)*	523	540
Sesamum	*(Delhi)*	683	673
Castorseed	*(Kanpur)*	288	290
Linseed	*(Kanpur)*	533	580
Sugar	*(Bombay) (a)*	625	657
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	240	240
Aluminium	*(Bombay) (d)*	1.505	1 505
Copper	*(Bombay) (e)*	3,690	3,670
Lead	*(Calcutta) (f)*	1.300	1,275
Zine	*(Calcutta) (g)*	1,732	1,610
Gold	*(Bombay) (h)*	1,730	1,688
Silver	*(Bombay) (i)*	2,695	2,645
Caustic soda	*(Bombay) (j)*	610	665
Soda ash	*(Bombay) (k)*	242	246

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap (g) Hard spelter, (h) Standard, (i) .996, (j) Flakes and (k) Tata

COMMODITIES

Cotton prices firm up

Bombay, August 17

Cotton prices have started to firm up despite reports of favourable progress of the monsoon and the announcement about the import of Pakistan cotton. Meanwhile, the Government of Maharashtra has issued an ordinance amending some of the provisions of the Maharashtra Raw Cotton (Procurement, Processing and Marketing) Act, 1971 and extending its duration by one year from June 30, 1981 to June 30, 1982. The amendment has been made to provide for better administration and for removing certain defects therefrom and making valuable improvements therein, which had been found necessary or had been recommended by the two committees appointed by the State Government and by the Reserve Bank of India.

A significant amendment to the Act provides that at the commencement of every cotton season, the Cotton Co-ordination Committee, appointed by the Government, will recommend to the State Government the guaranteed prices for different varieties or grades of cotton and where necessary, also of ginned cotton. On the recommendation of this committee, the State Government will notify the guaranteed prices for different varieties or grades of cotton and also ginned cotton.

The Act also provides for fixation of final price of cotton procured under the scheme, with reference to the position as on September 30 succeeding each cotton season. If the duration is for only one year, this stipulation reads a bit odd.

For margin money or equity base for generation of additional requirement of funds for the proper and continuous operation of the scheme—for one year, one presumes—it is proposed to establish a separate account to be called the capital formation fund. Each of the cotton growers as well as the agent appointed by the Government has to make a small contribution to the fund. The State Government will contribute to the fund not less than Rs 25 crores, on or before March 31, 1985, including any contribution already made by it for the purpose of the fund. Here again, it is not understood why a reference to 1985 is mentioned when the scheme has been extended only for the ensuing cotton season ending August 1982. There is no representative of the private textile industry in the co-ordination committee either.

Following the announcement of the procedure for import of Pakistan cotton, there have been doubts among industry circles whether there would be any enthusiasm among the mills to book any sizable cotton from Karachi.

The following has been the trend of prices of some of the leading varieties :

(Rs. per candy)

	August 7	August 14
Digvijay	5,100-5,200	5,050-5,100
Kalyan	4,800-4,900	4,700-4,800
Saurashtra CO2	4,900-5,150	4,800-5,050
Shankar 4	5,850-6,250	5,800-6,200
Maharashtra H 4	5,455-5,600	5,400-5,550
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,350-5,500	5,250-5,400
MP Y1	4,950-5,050	4,800-5,000
MP 1007	5,200-5,300	5,100-5,250
MP A 51/9	5,150-5,250	5,100-5,200
MCU 5 Guntur	5,900-6,150	5,900-6,100

Downtrend in yarn

Bombay, August 17

A downward trend was noticed in the local yarn market except in the case of 150D acetate during the past week. The prices of 150D NRC, 120D NRC, 150D CR and 120D CR decreased by 28 paise to Rs 52.03, 57 paise to Rs 54.23, 55 paise to Rs 51.76 and 55 paise to Rs 54.52 respectively, while the price of 150D acetate increased by 55 paise to Rs 49.01. However, the price of 100D SIV remained unchanged at Rs 55.07.

Jute goods suffer setback

Calcutta, August 10

Jute goods suffered a setback in the Calcutta gunny market during the past week after initially ruling steady. The reaction reflected disappointment over the delay in the decision on the industry's request for a subsidy on jute goods exports to help it push up exports against stiff competition offered by synthetics and products of other countries.

The jute trade and industry is concerned over the fact that despite the depressed prices currently ruling in the market, inquiries for jute goods are limited as is evident from the latest statistics published by the Indian Jute Mills Association on despatches during the month of June. Total despatches have dropped to 85,900 tonnes in June from 95,800 tonnes in May. Export despatches are lower at 30,900 tonnes compared to 35,300 tonnes while those for domestic purchases have fallen from 62,500 tonnes to 55,000 tonnes. The situation has aggravated because the recovery of carpet backing in the overseas market has received a setback. Export despatches of this construction are smaller at 6,500 tonnes against 7,500 tonnes. The total decline in despatches of sacking has been the highest presumably because of the bigger output of this construction following the transter of some looms to this item from carpet backing.

The report of a fresh Russian contract for about 21,000 tonnes of hessian and sacking has had no impact on the market. The order comprises 15,000 tonnes of hessian and 6,000 tonnes of sacking for delivery during August-September. With this order, the Soviet Union will be buying nearly 95,000 tonnes since the beginning of this year against 150,000 tonnes provided for in the trade protocol between the two countries. The gratifying factor is that the Soviet authorities have agreed to pay 100 per cent of the invoice value instead of hitherto practice of paying 97 per cent of the invoice value keeping 3 per cent for adjustments against claims.

In order to beat competition from synthetics and inspire confidence in the inherent qualities of jute, the United Nations Development Programme has launched a special 500,000 project to educate the end-users in north America, Western Europe and Australia. In a recent report, the FAO takes an optimistic view of the outlook for jute. Such an optimism emanates from the rising costs of synthetic raw materials. The consumers should be impressed with the greater resilience of jute. The strength of the fibre is greater than that of synthetic products.

The fibre market was steady throughout the week in moderate trading reflecting fresh mill buying. The price of jute was maintained at Rs 231.00 per quintal for the W-5 grade. The inflow into the market was fair, this being the peak arrival season.

Groundnut oil flares up

Bombay, August 17

Groundnut oil price sky rocketed to a historic level of Rs 164.84 per 10 kg on August 13

Engineering exports: Uncertainties over?

Concluded from page 359

ber and a third conference on sub-contracting and participation in third country projects with Japanese firms, in India in February 1982.

The EEPC which began with a membership of 30 in 1955 is expanding rapidly. Apart from its head office in Calcutta, it has four regional offices in India and a territorial office in New Delhi. It has 10 foreign offices and expects to double them by the end of the decade. This will not in itself promote exports, unless the offices are backed up by dependable market surveys and follow-up efforts in the region.

A major constraint to exports at present, according to the EEPC is the limitation on existing capacity of several engineering industries producing hand tools, cutting tools, bicycles and parts, automobiles, diesel engines, pumps, electric fans, machine tools and electric power machinery like motors, transformers, generators, electronic components and storage batteries. Existing units in these areas should be allowed to expand. In addition, many large engineering units need to be brought into the mainstream of exports. A recent survey of the top 31 engineering units has revealed that they export a mere 0.08 per cent of their turnover. They could be induced to contribute 10 per cent of their output to exports. Similarly, the production base of small units, which contribute about 30 per cent to the total of engineering exports, could be expanded.

THE AHMEDABAD ELECTRICITY COMPANY, LIMITED

Registered Office:
Jubilee House, Opp. Old Power House,
Shahpur,
AHMEDABAD-380 001
GUJARAT STATE

NOTICE

It is hereby notified for the information of the public that THE AHMEDABAD ELECTRICITY COMPANY, LIMITED proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-Section (1) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities. Brief particulars of the proposal are as under :

(i) Names of body corporate owning the undertaking : THE AHMEDABAD ELECTRICITY COMPANY, LIMITED

(ii) Capital Structure of the applicant undertaking :

(a) **Authorised Capital :**

		Rs.
15,00,000	Equity Shares of Rs. 100 each	15,00,00,000
5,00,000	Cumulative Convertible Redeemable Preference Shares of Rs. 100 each	5,00,00,000
		20,00,00,000

(b) **Subscribed and Paid-up Capital :**

8,74,771	Equity Shares of Rs. 100/- each fully paid up	8,74,77,100
2,00,000	11% Cumulative Convertible Redeemable Preference Shares of Rs. 100/- each	2,00,00,000
		10,74,77,100

(iii) **Details of the proposed substantial expansion :**

(a) Name of New goods to be produced, supplied, controlled or distributed or of new services to be rendered : No new goods are proposed to be produced etc. nor any new services is to be rendered.

(b) In case of substantial expansion of existing activities :

(i) Nam of the Goods : Generation, Transmission and Distribution of Electricity in the licenced areas of Ahmedabad and Gandhinagar in Gujarat.

(ii) Capacity before expansion : Installed capacity is 327.5 MW which because of ageing of some of the plants is derated to 270 MW.

(iii) Expansion proposed : It is proposed to instal one more unit of 110 MW generating capacity. This unit is being installed by way of replacement cum rationalisation.

(iv) Location of the Project for substantial expansion : The project would be sited at Sabarmati, Ahmedabad on the land located within the Company's existing Sabarmati Power Station.

(v) Brief outline of the cost of the project, the Scheme and source of Finance : The cost of the Project is estimated to be approximately Rs. 62 crores and the proposed sources of financing the project will be as follows :

Sources	**Rs. in crores**
Secured Term Loans from Financial Institutions	23
Secured Term Loans from Commercial Banks	10
Secured Term Loan from Government of Gujarat	20
Issue of Share Capital	6
Deposits from Consumers	3
	62

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated 19th day of August 1981

Sd/- J. J. RANA
Secretary

Notice

THE GWALIOR RAYON SILK MFG. (WVG.) CO. LIMITED

Regd. Office :
BIRLAGRAM, NAGDA
(M.P.)

NOTICE

NOTICE is hereby given that the Thirtyfourth Annual General Meeting of the Shareholders of the Company will be held at GRASIM CLUB, Birlagram, Nagda on Saturday the 19th September, 1981 at 4.15 P.M. (S.T.) to transact the Business mentioned in the Notice dated the 14th August, 1981 accompanying the Annual Report and Accounts for the year ended 31st March, 1981, separately posted to the Shareholders of the Company individually at their Registered Addresses.

The explanatory statement as required under Section 173 of the Companies Act, 1956, is annexed to the Notice.

NOTE :

(a) A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND THE PROXY NEED NOT BE A MEMBER.

(b) THE INSTRUMENT APPOINTING PROXY SHOULD, HOWEVER, BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN FORTYEIGHT HOURS BEFORE THE COMMENCEMENT OF THE MEETING.

Shareholders are requested to intimate to the Company change in their registered addresses, if any.

By Order of the Board
D. N. MAKHARIA
Secretary

20th August, 1981.

in the oilseeds market from the previous week's Rs 160.16. The closing was only a shade lower at Rs 164.32. The continued firmness was attributed to limited supplies and strong advices from Gujarat. Besides, stockists were withholding their stocks on anticipation of further rise in view of the impending festival season. Karad bold, Saurashtra bold and Saurashtra quality moved up further by Rs 4 each to Rs 646, Rs 651 and Rs 656 per 100 kg.

Most of the imported oils also improved on limited fresh supplies. Palmoleine hardened by Rs 2.09 to Rs 149.76 and RBD by Rs 1.52 to Rs 135.20 per 10 kg. Soyabean was, however, a shade lower at Rs 146.12 against Rs 146.64 per 10 kg in the previous week.

Castorseed and its oils were better because of the firmness in groundnut oil. Madras small and Kanpur bold gained Rs 3 each at Rs 329 and Rs 321 per 100 kg. Commercial oil moved up by Rs 1.50 to Rs 71.50 and BSS oil by a rupee to Rs 76.50 per 10 kg.

Linseed and its oil ruled steady-to-better in limited business. Linseed bold was up by Rs 2 at Rs 542 per 100 kg and its oil by Rs 2.08 at Rs 135.20 per 10 kg.

Among cakes, groundut expeller and cottonseed rose by Rs 25 each to Rs 2,075 and Rs 1,600 per tonne. Castor hardened by Rs 20 to Rs 780 per tonne, while de-oil ruled steady at Rs 1,575.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :—

	14-8-1981	8-8-1981
G. nut Karad bold	646.00	642.00
G. nut oil	164.32	160.16
Cast. Md. Sm.	329.00	326.00
Cast. oil com.	71.50	70.00
Cast. oil BSS	76.50	75.50
Linseed bold	542.00	540.00
Linseed oil	135.20	133.12

Grains divergent

Bombay, August 17

Foodgrains displayed a divergent tendency during the past week.

Among cereals, wheat ruled steady. The Saurashtra variety of wheat was traded at Rs 220-235 per quintal and the superior variety at Rs 280-325 per quintal. Demand was slack. The inflow averaged 800 bags per day.

Demand was good for south Indian varieties of rice. Supplies were limited. Bulk buyers were active. Surti Kolam variety of rice spurted by Rs 10 to Rs 350-410 per quintal. Exporters were keen on lifting the south Indian varieties. Basmati variety ruled steady at Rs 450-600 per quintal on poor demand. Export demand for basmati was limited. Arrivals were satisfactory.

In coarse grains, because of an acute shortage of supplies, bajra rose by Rs 15 to Rs 185-260 per quintal. Advices from producing centres were firm. Supplies were limited. Jowar and maize maintained previous price levels. Demand was slack. The inflow was limited. Jowar fetched Rs 190-225 per quintal. Maize was quoted at Rs 130-135 per quintal.

Barring gram, pulses ruled steady. The price of gram dropped by Rs 5 to Rs 415-425 per quintal on withdrawal of buying support by the consumers. Supplies were moderate. Moong (chumki) was sold at Rs 450 per quintal. Masoor dal persisted at Rs 515-520 per quintal. Urad (Khandesh) was placed at Rs 310-315 per quintal. Tur dal maintained the previous week's level of Rs 495-590 per quintal. Local demand was limited. Advices from producing centres were encouraging.

Sugar recedes

Bombay, August 17

Sugar suffered a setback in the local market during the past week. The C-30 grade of sugar slipped by Rs 9 to Rs 640-652 per quintal. The fall was attributed to extremely poor demand for the commodity. The undertone was hesitant. Activity was moderate. Sellers were keen. The price of C-30 sugar as on August 14, 1981 was lower by Rs 121 per quintal than on the corresponding date a year ago.

The State sugar factories slashed their rates by Rs 20 to Rs 610-615 per quintal. The sugar stock with the dealers improved to 5,000 bags.

Khandsari ruled steady at Rs 500-580 per quintal.

Both gold and silver up

Bombay, August 17

Uptrend in both gold and silver marked the trading in the Bombay bullion market during the past week.

Standard mint gold opened at Rs 1,700 per 10 gm. and moved up to close firm at Rs 1,735 per 10 gm. Ready silver (.999 fineness) commenced at Rs 2,665 per kg and after dropping to Rs 2,645 per kg, it shot up to Rs 2,790 per kg before closing at Rs 2,760 per kg.

Money comfortable

Bombay, August 17

Conditions were comfortable in the Bombay short-term money market during the past week.

Interest rates opened at 10 per cent and fluctuated between 8 per cent and 10 per cent till Thursday (August 13). The rates, however, declined to close at 6 per cent.

Aggregate deposits decline

Bombay, August 17

Aggregate deposits of scheduled commercial banks declined by Rs 55.84 crores to Rs 40,556.34 crores during the week ended August 7, 1981. Bank credit expanded by Rs 64.41 crores to Rs 26,843.41 crores. The balances of banks with the Reserve Bank of India (RBI) increased by Rs 180.41 crores to Rs 5,186.32 crores and their borrowings from the RBI by Rs 10.44 crores to Rs 556.87 crores.

Anti-social sugar cooperatives

Concluded from page 368

field and factory — and provision of other amenities to workers, not to speak of the many levies and taxes by governments — Centre and state — have all combined to raise the production cost of sugar to the factories and the price of sugar to the consumer.

Many would have been content to pay a price warranted by the production cost plus excise, sales tax, etc, plus also reasonable margin of profit, but, as we have a system of sugar rations, sugar prices in the free market have not only to make up for the producers' loss on levy sugar but also to satisfy a number of parties which constitute the entire sales structure today. The quantum of rationed sugar being low, the demand for free sugar is bound to be nearly, and here it is only the inexorable law of supply and demand that operates, with what results everyone knows, and not the genuine needs of the poor consumer!

For no fault of their own, joint stock sugar factories are now obliged to be in the queue for supplies of cane; they have no hand either in fixing cane or sugar prices, or in deciding the purpose for which cane is used. Thanks to the increased demand for cane on account of illicit distillation, on the one hand, and of the demands of *khandsari* sugar, on the other, gur prices also are ruling above, even higher than the high sugar prices in the free market at present If, as a result, more cane is diverted to these two sources, the overall availability of cane supplies to sugar factories is bound to suffer, further. That, again, takes up the cost of production in a factory, the full installed capacity of which is adversely affected in the process.

One would be an optimist, therefore, to expect that sugar prices to the consumer in India would ever become reasonably fair. The vested interests wanting to keep prices up are so many, not all of whom are amenable to control. Even the Government which wants to raise as much revenue as possible, is a vested interest, wittingly or unwittingly. It is high time that the consumer gave up the sedulously sustained belief that the advent of co-operatives and the absence of the traditional middlemen would mean a lower price for him. Instead of the one known middleman, there are today so many more that what is saved in the swings is lost in the roundabouts. Those who have long believed in the genuine co-operative spirit must now be rubbing their eyes in consternation! I often wonder whether, as between the middlemen of old and the co-operatives of today, the former were not relatively more considerate to the consumer.

Beyond headlines

Anti-social sugar cooperatives

By R. V. MURTHY

FAR from being "the noble gospel of co-operation" that the fathers of the co-operative movement in Maharashtra, like the late Prof D. R. Gadgil and the late Mr Vaikunthbhai Mehta, intended it to be, the co-operatives of today — more so the sugar co-operatives in the State — have brought disrepute to the entire co-operative movement. They seem to have totally forgotton why patriotic Indians chose to go the whole hog with the pioneers of the co-operative movement, namely the expectation that, with the advent of co-operatives and the resulting elimination of greedy middlemen, the consumer would be the gainer, requiring to pay much less for what he might buy than ever before, as the example of one commodity — sugar — emphasises. Sugar co-operatives have not only been responsible for the high sugar prices the consumer has to pay today, higher even than his counterparts in England and elsewhere, but are opposing imports of sugar by the Government with a view to bringing down sugar prices in the country, on the plea that the 1981-82 season's sugar production is likely to be 68 lakh tonnes !

Having watched the rise and progress of sugar co-operatives, especially in Maharashtra, over the years, I fully endorse the remark, therefore, that 'recent experience of the co-operative sugar factories has conclusively proved that co-operatives are as socially irresponsible as any form of economic organisation' in the widely read "Editor's Notebook" column of your esteemed journal (vide P-207 of *Commerce* dated August 1, 1981). Years ago, I recall, after a more or less similar experience, I wrote an article in *Eastern Economist* to which I gave the title "Co-operative Cruelty". How apposite that title was is clearly seen in retrospect now. Much water has flown down the Krishna since that article was written though, but nothing has transpired to make me think of revising the title, what with the maximum use of the political clout these co-operatives have been making to further their own selfish ends.

It is a pity that some joint stock sugar companies should have, in the past, joined sugar co-operatives to plead with the government for a wholly anti-consumer sugar policy. At least from their own experience of the behaviour of sugar co-operatives ever since Maharashtra took to these co-operatives, they ought to have realised that their fortunes have been made the playthings of these sugar co-operatives even more than the policies of the state government. If sugar prices in the country are as high as they are, today, the blame for it lies, in the main, with sugar co-operatives. In the name of helping these co-operatives with concessions on one score or other, the state governments concerned have imposed more and more burdens on the private sector sugar industry. After all, joint stock sugar companies who are answerable to their shareholders could not be expected to bear these new burdens beyond a point. And when they passed on the incidence of these burdens even partly on to the consumers, the consumers began protesting. How can the consumer be expected to know that it is the state's policy of pampering sugar co-operatives that has resulted in the present high prices of sugar? Let me cite some glaring instances of state policy.

First, there is the question of cane supplies. When the Maharashtra State Government allowed a co-operative sugar factory to function in a given area, it did not realise that notwithstanding all their good intentions, the authorities could not possibly prevent diversion of cane supplies from the joint stock companies to the new co-operative sugar factory. There is a good reason for this too. Cane growers forming a sugar co-operative society are not only assured of a dividend on their shareholding in their society but also a handsome price for their supplies of sugarcane to their factory, thanks to the state polcy of assuring an economic price to the grower. Now, to the extent that some of these cane growers, who were former suppliers of cane to joint stock sugar companies, switched over their cane supplies to their own co-operatives, the joint stock companies were deprived of their share of cane supplies. Also, the latter could not get cane from independent cane growers unless they paid a higher price than the sugar co-operatives, and the prices in the latter case were determined by the cane grower-members themselves who naturally saw to it that they got their pound of flesh.

It was to overcome disputes regarding cane supplies to joint stock and co-operative factories that the idea of zones was conceived so as to make it obligatory for canegrowers in a given zone to supply cane to the factory in that zone: whether joint stock or co-operative. In practice, however, this did not yield the desired results, partly because of lack of effective enforcement and partly because even errant co-operatives had the local party man to back them up and save them from punishment. It is not surprising, therefore, that a subsequent proposal to form zones for procurement of cane for various factories has not been taken seriously by most sugar factories. There would be full support to the proposal only in the event of there being a rational basis for the formation of these zones. However, one does not know as yet what the basis is to be.

Secondly, there was the Maharashtra Land Ceilings Act, followed later by the decision of the State Government to take over even the land belonging to joint stock farms (over and above the ceiling fixed) for its own State Farming Corporation. No one — not even joint stock sugar factories — would have minded this highhandedness, had the State Farming Corporation been able to maintain the quality of the cane grown and to ensure adequate cane supplies at a reasonable price to all sugar units. But, on neither of these counts has the State Farming Corporation acquitted itself commendably.

Thirdly, contrary to expectations, even after the coming up of the Maharashtra State Farming Corporation, prices of sugarcane have gone on rising. To add to this, there has been an anomaly too by way of the Maharashtra Governmen wanting to fix its own cane price, in the face of the advice of the Prime Minister to all state governments and the actua fixation of a specific price by the Union Government. Moreover, as against the old ex-factory price for supply by the grower, at his own cost, of cane at the factory gate, the ex-factory price today has also to provide for transportion and handling of the cane from the field to the factory.

A number of other factors too have contributed to the recent rise in sugar prices. Water charges, wages to labour —

Continued on page 96

Mr Murthy is a former editor of Commerce.

COMMERCE

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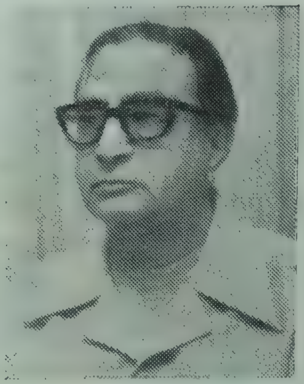
PEOPLE

Mr Ramesh Mukund Pradhan, who has been appointed executive director of Central Bank of India, has been with the bank since 1943 and worked in many important positions at several branches throughout India. Mr Pradhan, who is a B.Com and C.A.I.I.B., was actively associated with the committee of directors—Tandon Committee. He was promoted as general manager of the bank in November 1978 and this post he held till he moved over to his present assignment

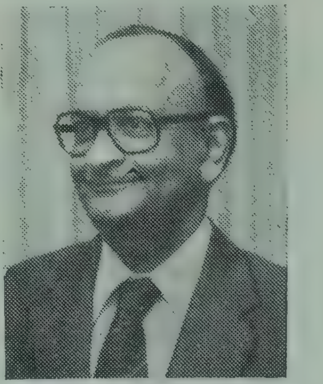


Pradhan

Shukla

Mr Dhansukh Nanalal Shukla, till recently general manager (operations) at the Bank of India, has been promoted executive director with effect from August 13 last. After his graduation from the Bombay University, Mr Shukla joined the Bank in 1949 and was sent to London for higher training in 1954. He was there for 14 years being placed in-charge of the bank's overseas establishments in East Africa. He returned to India in 1969 to take up more responsible assignments with the bank. Mr Shukla is a keen golfer too.

Mr P. B. Sreenivasan, 56, the newly appointed executive director of Indian Overseas Bank, was till recently its general manager. He joined the bank as a probationary officer in 1946 and since then worked in the bank's offices in India and Bangkok. He was regional manager at Bombay during 1967-71 and was promoted assistant general manager in 1971, as deputy general manager in 1975 and as general manager in 1978.

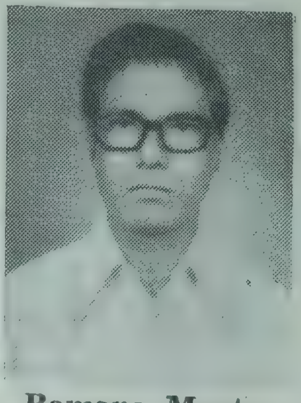


Sreenivasan

Rao

Mr H. N. Rao, executive director of Syndicate Bank with effect from August 13 last, came to it in 1946 after obtaining his B.Com. from Bombay. Mr Rao, who has also studied law and is a Fellow of the Indian Institute of Bankers, was till recently general manager of the bank and played a major role in its policy making and brought his influence to bear in areas like credit, investments, development, accounts, taxation and foreign business.

Mr B. V. Ramana Murty, general manager (finance) in Andhra Pradesh Industrial Infrastructure Corporation Ltd. has been elected chairman of the Andhra Pradesh chapter of the Institute of Cost and Works Accountants of India and Company Law Secretaries. A graduate in commerce, arts and law, Mr Murty has over 21 years experience in industry, banking and development corporations.



Ramana Murty

THE WEEK

None of the onshore and offshore blocks reserved for Oil India Ltd and Oil and Natural Gas Commission will be transferred to foreign companies for exploration, Union Petroleum Minister, Mr P. C. Sethi, categorically told the Lok Sabha. Meanwhile, Tripura project of ONGC was poised for a big breakthrough and gas was likely to be struck there, according to ONGC officials. ★

The Union Commerce Minister, Mr Pranab Mukherjee, has ruled out nationalisation of tea industry as a panacea for all its ills. He told the Lok Sabha that instead the Government would prefer to initiate measures to correct certain distortions that had crept into the industry's functioning. ★

The Integral Coach Factory has bagged a new export order valued at Rs 3.5 crores from Nigeria for supply of 30 brake vans. ★

There will be an overall power shortage of about 10.9 per cent or 15 billion units during the current fiscal year (1981-82) as against 12.7 per cent in 1980-81 and 16.1 per cent in 1979-80. The anticipated power generation in 1981-82 was 122 billion units as against requirements of 137 billion units, Mr Vikram Mahajan, Union Minister of State for Power, told the Rajya Sabha. ★

About 22 million mandays were lost during 1980 due to lockouts, while production loss amounted to Rs 124.53 crores as against Rs 125.63 crores in 1979, according to latest official estimates. ★

Procurement of new kapas under the Maharashtra Government's monopoly cotton procurement scheme has begun in western Maharashtra. The State Government's purchasing agency has paid an advance price of Rs 490 per quintal for Varalaxmi cotton as against the last season's guaranteed price of Rs 530. ★

The Union Government has reimposed export duty of Rs 75 per quintal on coffee with effect from August 21 last in view of the rising prices of this commodity in world markets. ★

The Union Government announced a higher quota for sale of sugar during September — 271,000 tonnes for levy and 200,000 tonnes for free sale. This brought down the retail prices to Rs 5.60 per kg. Alarmed at the downtrend, Bombay Sugar Merchants Association, in an unprecedented move, arbitrarily fixed floor prices of Rs 520 to Rs 550 per quintal. Its move has come in for widespread criticism. ★

Wholesale price index

At 287.2 the latest official wholesale price index for the week ended August 8, 1981 showed a rise of 0.2 per cent over the preceding week and 10.3 per cent over the year.

Money stringent

Conditions were comfortable in the Bombay short-term money market as of Monday (August 25). Both notified and commercial funds were renewed at 9 per cent while fresh money was transacted at 8.5 per cent.

COMMERCE

Oil : New ambitious target

IT is a measure of our concern to reduce the dependence on imported oil that programmes announced in the Sixth Five Year Plan document, published only last year, have been recast to aim at a higher target of production of indigenous oil. The Sixth Plan estimated that the production would rise to only 21.6 million tonnes by 1984-85, 13.2 million tonnes of it coming from offshore fields and 8.4 million tonnes from the onshore fields of both the Oil and Natural Gas Commission and Oil India Limited. This target has now been raised and the Minister for Petroleum, Mr P. C. Sethi, has announced that the offshore production would be increased to at least 20 million tonnes and the onshore production to 10 million tonnes making a total of 30 million tonnes by 1984-85.

Mr Sethi has also expressed the hope that consumption of petroleum products in the country would rise from 31 million tonnes in 1980-81 to only 43 million tonnes by 1984-85, which would mean imports of the order of 20 million tonnes of crude oil and petroleum products that we would be making this year would be reduced substantially, This hope, however, can only materialise if there is a national energy policy, which would aim at curbing the growth rate in consumption of petroleum products and place greater reliance on coal, hydro-power, bio-gas and other new and renewable sources of energy. The enforcement of such a policy which would lead to a better utilisation of petroleum products in industry, transport and agriculture is imperative. Otherwise the growth in consumption rate of petroleum products might bounce back to nine or ten per cent despite the sharp hikes in prices of petroleum products announced last July, and imports of crude oil and petroleum products would have to be on a much higher scale than envisaged. This would mean that the import bill on account of crude oil and petroleum products, though not of the order of Rs 5,200 crores, as during 1980-81 and 1981-82, would still be a sizable one, putting strains on the foreign exchange reserves. It is the anticipated deterioration in the balance of payments position on account of heavy oil import hike that has forced the Government of India to seek a loan from the International Monetary Fund of no less than Rs 5,000 crores to tide over the situation that might arise during the next three or four years.

It is a happy coincidence that when such ambitious plans are being drawn up for the offshore production in particular, the Oil and Natural Gas Commission, founded on August 14, 1956, should be celebrating its silver jubilee. Oil India that has a 50 : 50 partnership between the Government of India and Burmah Oil is also slated to be taken over wholly by the Government by paying a compensation of over Rs 21 crores to the erstwhile private partner. The main function of the ONGC, as laid down by the statute was "to plan, promote and implement programmes for the development of petroleum resources and production and sale of petroleum products, produced by it", though later the refining of crude oil and sale of petroleum products were entrusted to the Indian Oil Corporation and the ONGC concentrated on exploration for oil and its production.

The ONGC set out on its search for oil with a government equity capital of Rs 8.43 crores during 1959-60 and today it has paid over Rs 808 crores to the Government in the form of dividends, cess, taxes and royalties. It has acquired assets worth Rs 915 crores and has grown into an organisation of 28,000 employees. These scientists, technologists and geologists of the ONGC, it is claimed, have been able to assimilate and absorb over 100 years of technology within twenty-five years of its growth and development—a fact acknowledged by the elite of the world oil industry. The ONGC has established three institutes to back its R & D efforts. These include the Institute of Petroleum, Exploration at Dehra Dun, the Institute of Drilling Technology at Dehra Dun and the Institute of Reservoir Studies at Ahmedabad. It is developing its own supply base at Nhava island off the Bombay harbour, and will operate and maintain its own three satellite earth stations linking its own communication facilities. In its growth the ONGC has been helped by such friendly countries like the Soviet Union, Romania, Yugoslavia, France, the UK, the US and Canada. It has taken up so far for drilling, both onshore and offshore 250 (199 on land and 51 offshore) structures and its success ratio has been quite high with 80 structures having been found oil and gas bearing out of the 223 tested so far. The ONGC has produced a total of over 82.17 million tonnes of oil in the two decades since 1961 and the cumulative supply of gas has been 8,245 million cubic metres. What is more it has helped to set up sophisticated oil-related industries such as the construction of rigs at Bharat Heavy Electricals and of offshore platforms at Mazagon Dock. Drilling and workover rigs, offshore platforms, supply vessels, pumps, line pipes, oil well flow control systems, power transmission systems, items of total mud systems, geo-scientific instruments, drilling bits are all now manufactured within the country.

Obviously there is a challenging task in the next five years. With the signing of a 40-year agreement with CFP of France on August 12, to help develop and exploit the oil reserves of Bombay High and other promising structures in the vicinity, the financial outlay of the ONGC's Five Year Plan for 1980-85 has been stepped up by more than 50 per cent to Rs 4,788 crores from the original figure of Rs 3,370 crores. This outlay may still go up further as, along with the accelerated development of plan for offshore fields, an accelerated plan for the eastern region is also under the consideration of the Government. The Government has, in view of this large outlay, raised the price of Rs 305 per tonne for onshore crude and Rs 475 per tonne for offshore crude to a uniform price of Rs 1,182 per tonne. The ONGC expects thus to generate enough resources internally to meet the increasing expenditure on oil exploration, development and production. But the possibility of the ONGC having to take recourse to foreign exchange loans must not be ruled out. The Petroleum Minister, Mr P. C. Sethi, has promised on behalf of the Government that there would be no dearth of finances, particularly of foreign exchange, for oil exploration. Crude oil production which was targeted at 15.5 million tonnes for the western region, 12.2 million tonnes for the eastern region an 51.3 million for offshore will also be stepped up and offshore fields are estimated to yield 89.37 million tonnes of crude and 8,258 million cubic metres of gas. The expansion plans will necessarily demand accretion in strength of the technical and scientific personnel of the ONGC. Some of the experienced personnel of the ONGC have left for more paying jobs and such a brain drain must be stopped. The Government also expects some foreign companies to undertake exploration in the country and presumably along with foreign experts they will use Indian personnel. All the three institutes that the ONGC has launched and the planned offshore technology research division in Bombay have to be strengthened. With recoverable reserves placed at present at 375 million tonnes, production at 30 million tonnes a year can be sustained only for 12 years. So new oil strikes will have to be made and both the ONGC and Oil India will have to intensify their search for oil.

Bonus guidelines : Helping investment climate

THE Government has been issuing from time to time detailed guidelines for examination of the applications for bonus issues. The successive revisions of the guidelines have served objectives such as modification, streamlining, liberalisation or tightening of the quantum and procedure of capitalising the retained earnings by companies for the issue of bonus shares. The latest guidelines announced on August 18 have modified the existing guidelines on the computation of the quantum of residual reserves and the capitalised value of earnings. Accordingly, the residual reserves after the proposed capitalisation should be at least 40 per cent of the increased paid-up capital as against 33.3 per cent heretofore. Similarly, 30 per cent of the average profits before tax of the company for the previous three years should yield a rate of dividend on the expanded capital base of the company at 10 per cent instead of 9 per cent hitherto.

The effect of the revised guidelines on the quantum of residual reserves and capitalised value of earnings is to move them upwards. If the rationale for increasing the percentage of residual reserves and for raising the capitalised value of earnings is that the reserves remaining after capitalisation should enable the maintenance of dividend in future on the expanded capital base of the company, it cannot be accepted as a satisfactory one. For all practical purposes the issue of bonus shares may prove to be a mere accounting adjustment of transferring amounts from reserves and surplus account to paid-up equity capital account unless the company at least maintains the same rate of dividend on the expanded paid-up capital base. It is true that the existing as well as the revised guidelines require the company to indicate the intention of the management regarding the rate of dividend, to be declared on the increased capital in the year immediately after the bonus issue is made, in the resolution passed by the general body meeting of the company for authorising the bonus issue. But this is clearly an inadequate and non-enforceable undertaking in respect of the maintenance of the dividend rate as any such guarantee is meaningless in so far as the actual profits which will be earned by a company, or the actual dividends which will be paid by a company, cannot be predicted or guaranteed by anybody inadvance.

On the other hand, if the rationale is to underscore the need to maintain at a high level the rate of return on equity investments in line with the increased return on debt investments brought about by the successive hikes in the rate of interest on debentures which at present remains at 13.5 per cent, the new guidelines should be welcomed. It may be recalled that when the residual reserve at 33.3 per cent and the capitalised value of earnings at 9 per cent was stipulated in 1975, the rate of interest on debentures remained at 10.5 per cent. As a corollary to the restrictions on the quantum of bonus issues, the companies may find themselves capable of making liberal dividend payments. Because of these influences, if the dividend rates take a general upturn, it will indeed give a fillip to the investment climate.

The new guidelines lay down that a company may make a further application for the issue of bonus shares only after 36 months from the date of sanction by the Government of an earlier bonus issue thereby replacing the three timing tests being applied heretofore, viz., that not more than two bonus issues will be allowed to a company over a period of five years, that between two successive announcements of bonus issues of a company, there should be a time lag of at least 24 months and that a company may make a further application for issue of bonus shares twelve months after the scrip in respect of last bonus issue is listed or after the completion of despatch of the share certificates. The new guidelines have thus widened the time lag between two successive issues of bonus shares as henceforth not more than two issues will be allowed to a company over a period of six years as against two allowed over a period of five years. Presumably, the time lag between two successive bonus issues is widened to give sufficient time to the companies to build up the increased level of residual reserves deemed necessary as per the revised guidelines. However, it may prove to be a blessing in disguise to the stock market speculators.

Apart from the above, the new guidelines have also sought to remove the two exemptions being allowed so far to the overall maximum limit for capitalisation, which is equivalent to the total paid-up capital of a company: (i) to finance approved schemes of expansion or diversification, and (ii) to bring down the foreign shareholdings under Foreign Exchange Regulation Act, 1973 (FERA) for continuance of existing business activities. The removal of the exemption allowed in respect of the bonus issues made to finance approved schemes of expansion or diversification may prove contrary to the present attempts of the Government in reducing the dependence of the corporate sector on the financial institutions. There is a strong case for its restoration.

The bonus issue guidelines announced on August 18 contain, in addition, two new clauses. According to the first clause, no bonus issue will be permitted if there is sufficient reason to believe that the company has defaulted in respect of the payment of statutory dues to the employees such as contributions for provident fund, gratuity, bonus, etc. As per the second clause, in cases where there is any default in the payment of any term loans outstanding to any public financial institution, a no-objection letter from that institution in respect of the issue of bonus shares should be furnished by the company concerned along with the bonus issue application. These stipulations should be described as good legislation in keeping with the changing concepts of social responsibility of corporate managements.

Export-Import Bank

THE much-awaited legislation on the formation of the Export-Import Bank has been passed by the Lok Sabha on August 18. The Export-Import Bank of India, to be so constituted, would provide financial assistance to exporters and importers and function as the principal financial institution for co-ordinating the working of institutions engaged in financing export and import of goods and services in the widest sense of the terms. It would refinance commercial banks and financial institutions in their export-import-financing activities.

The functions of the bank would include: (a) financing of exports from and imports into not only India, but also third countries of goods and services; (b) financing of joint ventures in foreign countries; (c) financing of export and import of machinery and equipment on lease basis; and (d) providing loans to an Indian party so as to enable it to contribute in the share capital of a joint venture in a foreign country. It would also undertake limited merchant-banking functions such as underwriting of stocks, shares, bonds or debentures of companies, engaged in the export or import and providing technical, administrative and financial assistance to parties in connection with export or import. The Export-Import Bank can also undertake the developing and financing of export-oriented industries. It is also proposed to entrust the Export-Import Bank with the task of undertaking transactions involving a combination of government-to-government and commercial credit for the purpose of export or import. The bank would also give lines of credit to foreign governments and foreign financial institutions and enter into collaboration with similar institutions in developing countries through participation in the share capital of such institutions.

The bank would have an authorised capital of Rs 200 crores which may be increased by the Central Government to Rs 500 crores. The issued capital would be wholly subscribed by the Central Government. Rs 50 crores has been provided in the budget for 1981-82 towards the issued capital of the bank. Rs 25 crores would be contributed by the Central Government each year from 1982-83 to 1987-88 so that the paid-up capital is brought up to the authorised capital of Rs 200 crores. The Central Government would grant a soft-loan of Rs 20 crores to the bank which would be repayable in fifteen annual instalments after a moratorium of fifteen years, the rate of interest being five and a quarter per cent. The bank would also be able to borrow from the open market through the issue of bonds and debentures. Funds from the National Industrial Credit (Long-term Operations) Fund, set up by the Reserve Bank of India at the time of the establishment of the Industrial Development Bank of India, would also be available to the Export-Import Bank for the purpose of its business. The bank would be able to borrow foreign currency in or outside India as also to raise resources by acceptance of gifts and grants.

The Export Development Fund to be set up would be utilised for purposes like research, training, survey and market intelligence relating to India's international trade. The business of the Industrial Development Bank of India (IDBI) in so far as it relates to the export financing functions would be transferred to the Export-Import Bank. The bill also provides for the transfer to the Export-Import Bank of any other functions of the Industrial Development Bank of India. The bank will be exempt from the payment of income tax and all other taxes on income, profits or gains, on the lines of exemptions given to the Reserve Bank of India and the Industrial Development Bank of India. The Export-Import Bank will be able to appoint its nominees on the boards of directors of companies assisted by it.

LETTER FROM LONDON

FRANK BROADWAY

Interest rate dilemma

WHILE politicians and economists continue to disagree about the exact point Britain has reached in the cycle of recession and recovery, bankers, businessmen and Treasury officials have been worrying about interest rates.

The arguments about whether or not the recession has ended which have made headlines in Britain, hinge on the definition of a recession. The Chancellor of the Exchequer, Sir Geoffrey Howe, believes the worst is over because for most of this year the economic indicators have been signalling a progressive slowing in the rate of decline. Critics believe that a recession has not ended until there are positive signs of recovery. If the two camps got together and agreed that the economy was bumping along the bottom and recovery would be slow, they would achieve an accurate, if inelegant, description of the situation.

In constrast to the wordy arguments over economic prospects, the interest rate dilemma is real and earnest. It affects the sterling exchange rate, and consequently the prospects for continuing decline in the inflation rate. It also affects profitability in British industry, and the chances for economic recovery.

The basic dilemma is that there is an unusually widespread of short-term interest rates among the major industrial nations, ranging from under ten per cent in Japan to prime rates of twenty per cent and over in the United States and Italy.

Britain is well towards the lower end of the range, with short-term rates based on an official minimum lending rate (MLR) of 12 per cent, although this guideline is to be abolished on August 20 to give the financial markets a greater role in deciding the level of rates. The relatively low level of interest rates in Britain is the result of government policy intended to help economic recovery.

In March, the Chancellor of the Exchequer announced a cut in MLR from fourteen to twelve per cent as the major concession to industry in an otherwise tough budget. The expectation at the time was that there might be further cuts in British interest rates as the years progressed.

In fact, a number of pressures have developed which have recently made the money markets speculate on the possibility that the authorities might have to accept a general rise in interest rates.

The most obvious pressure has come from the dramatic fall in sterling against the US dollar. On budget day in March, the pound closed at 2.2285 dollars. It has recently been traded at under 1.84 dollars. The main reason for the fall, and for continuing instability, is the big interest rate differential between London and New York. Also petro-currencies, of which sterling is one, have lost some of their attractions in face of the current oil glut.

In March, the pound had already fallen some twenty cents from its peaks in January, and the British authorities doubtless expected it to fall further when they lowered interest rates at a time when American interest rates were rising. In the event it may have fallen too far too fast, and uncertainty about possible further decline is adding to the uneasiness of world currency markets. With many of Britain's imports denominated in dollars, the sterling cost of industry's raw materials is beginning to edge up, threatening a resumption of inflation after the encouraging decline of recent months.

The Government's policy is to leave the exchange rate to be determined primarily by market forces. Whether the rate is rising or falling, intervention by the authorities is limited to "smoothing" in order to moderate excessive fluctuations and preserve orderly markets. The Bank of England did allow short-term interest rates to rise during July because it was felt to be appropriate to bring shorter-term interest rates into line with longer-term rates. Clearly the exchange rate is one of the factors taken into account in judging monetary and financial tightness and in deciding on the appropriate level for interest rates.

With the US authorities reiterating that high interest rates will remain until at least the end of the year, some economists believe it may be difficult to achieve stability in sterling exchange rates without increases in British interest rates.

Apart from exchange rate pressures, technical factors in the London money markets are also signalling a general increase in short-term rates. This partly reflects the attractions of lending abroad, but the commercial banks are also anxious to raise overdraft rates to improve the ratio between deposits and lending.

Set against the pressures to allow interest rates to rise is the Government's natural reluctance to do anything to set back economic recovery. As the Confederations of British Industry has pointed out, higher interest rates would increase the costs of stockholding and investment, and eventually feed through into higher consumer prices or reduced profits.

The end of MLR on August 20 may help to ease the Government's difficulties. It will not be replaced by any new official rate but the Bank of England will aim to keep short-term rates within an undisclosed band, which will be changed from time to time, depending on monetary conditions. The intention is to reduce delays in changing interest rates and to give the financial markets a greater role in deciding the level of rates. At the same time it will give the authorities better control over growth in the money supply.

The progress of the medium-term, financial strategy is difficult to judge because of distortions caused by the 21-week civil service industrial dispute, which has now been settled within the Government's pay limits. The major distortion has arisen from delay in collecting taxes estimated to total around £6 billion, but adjusted figures for the money supply suggest that it is being held within the Chancellor's six to ten per cent annual growth guidelines.

The struggle to keep the public sector borrowing requirements in line with the Chancellor's projections will be resumed when Ministers return from their summer holidays and the Government seeks a further round of public spending cuts.

Although the Govenment firmly rejects any involvement with an incomes policy, the coming winter's round of wage negotiations will have a crucial

Continued on page 390

Oil policy in the eighties

By **P. C. SETHI,** *Union Minister for Petroleum and Chemicals*

THE repercussions of recent increases in oil prices on the Indian economy have been many. Among these are the high cost of oil imports, substantial trade deficits and cost-induced inflation. In the early years of the oil crisis, these effects were not as severely felt as now. In 1980-81, the import bill on account of crude oil and products was Rs 5,167 crores, as compared to Rs 3,212 crores in 1979-80 and Rs 541 crores in 1973-74.

The import of crude oil and products in 1980-81 was 16.25 million tonnes and 7.06 million tonnes respectively. The respective figures for 1973-74 were 13.87 million tonnes and 3.55 million tonnes and for 1979-80, 16.12 million tonnes and 4.48 million tonnes. Though the quantitative difference in imports in the last two years was only about 2.5 million tonnes, it will be observed that the difference in cost was around Rs 2,000 crores. This shows the magnitude of the rise in petroleum prices in the world market in a single year alone.

There is currently a glut in the oil market due to the slower growth in oil consumption in advanced countries, higher prices of certain OPEC crudes and less stockpiling demand. Consequently, in the June OPEC meeting a price freeze was announced. But the easy supply conditions may be a transient feature only once the major exporters of crude oil start imposing production cuts to tighten the market conditions. Our dependence on imported crude oil for meeting domestic demand was to the extent of about 63 per cent in 1980-81, as compared to 61 per cent and 64 per cent respectively in 1975-76 and 1970-71. As regards product imports they constituted 6 per cent, 9.8 per cent and 23 per cent of our total oil consumption in 1970-71, 1975-76 and 1980-81. It is these two factors — high cost of oil imports and high level of import dependence — which have brought oil policy into sharp focus and have made it a major concern of every one.

The two main aspects of our oil policy for the present decade are : (1) intensification of domestic exploration and stepping up of oil production, and (2) curbing of oil consumption. These, in other words, are the supply and demand dimensions of the oil problem. I shall briefly touch upon these areas in the following sections.

(1) *Domestic exploration and development of oil reserves* : To increase domestic production the basic prerequisites are substantial proven and recoverable oil reserves, adequate finance and technology. The country's proven and balance recoverable reserves were 366 million tonnes only at the beginning of last year and our annual consumption of petroleum products at present is around 30 million tonnes. The additions to the reserves through new discoveries have been varying from four per cent to ten per cent every year. One country which recently achieved self-sufficiency in oil is the UK and this country had total recoverable reserves ranging from 2.2 to 4.3 billion tonnes in 1980. The UK's total oil consumption last year was 71 million tonnes or 0.6 per cent of total recoverable reserves. In our case last year's consumption was 8.5 per cent of proven reserves. Besides this, in Britain the goal of self-sufficiency was also the immediate result of reduced consumption. As at present, our limited oil reserves do not permit us to drive too far in the direction of self-sufficiency.

Mr P. C. Sethi

Enlarging reserves

Finance and technology are the other two constraints in increasing domestic production. For several projects of oil exploration and production, the Government is seeking financial assistance from the World Bank, Exim Bank of USA, the Euro-dollar market etc in the case of offshore in particular. We are deficient in technology and equipment like drilling rigs. Nevertheless, these may be considered short-run handicaps, while the size of oil reserves is a basic cause for concern.

To enlarge the size of reserves, the ONGC and Oil India have been undertaking geological and geophysical surveys and studies, besides, exploratory drilling. During 1978-81, the ONGC conducted 132 party years of surveys in onshore and offshore areas and expects to conduct another 218 party years of surveys in the onshore alone in the next four years, that is, 1981-85. In the case of exploratory drilling, the ONGC was able to drill 159 wells covering 3.65 lakh metres in onshore and 82 wells covering 2.40 lakh metres in the offshore during 1981-85.

Though the achievements in the last three years against the targets for surveys and drilling have been unsatisfactory, the ONGC has been able to discover a few new sources of oil or gas at Dehej, Lohar and Mahi High in the western region and Cachar, Napampua, Rokhia and Gojalia in the eastern region. Oil was also discovered in Godavari and Ratnagiri structures. As a part of increasing the tempo of exploration in the Sixth Five Year Plan, the ONGC will explore prospective shoal areas between the Mahi and Tapti rivers in the Gulf of Cambay and in areas like the Patan depression in the northern part of the Sanchar-Barmer basin and in Kutch and Saurashtra. In the eastern region, it is planned to start drilling in virgin areas like the Dhansari valley and also in Cachar. Exploration work will also be taken up in the northern bank of Brahmaputra, Cauvery basin, the Sunderbans in West Bengal, Tripura and the Vindhyas. In the offshore, too, the ONGC will continue to conduct surveys and exploration.

Oil India's exploration work is confined to Assam, Arunachal Pradesh and the Mahanadi basin. Its role at present is not as extensive as that of the ONGC. To supplement the exploration activities of these two agencies, the Government is trying to involve foreign oil companies with their finance and technology. The first round of negotiations is going on and we hope to achieve some results in this regard in the near future.

Production

On the production side, the total domestic production of crude oil in 1980-81 was 10.5 million tonnes, as compared to 11.7 million tonnes in the previous year. In the last year there was a shortfall in crude production owing mainly to the Assam agitation. In the next four years, the ONGC's target of total production is 24.1 million tonnes from onshore fields and 46.1 million tonnes from offshore areas. However, in view of the mounting burden of oil imports, an accelerated plan to raise the ONGC's production from 46.1 to 58.14 million tonnes from the offshore areas has recently been drawn up and is under the active consideration of the Government. The yearwise break-up of the ONGC's onshore and offshore production for the remaining four years of the Sixth Plan is as shown in Table 1.

The onshore production target of 24.1 million tonnes may also be revised upwards and the necessary accelerated plan is under preparation.

(2) *Curbing oil consumption*: Demand management has a major role to play in any meaningful oil policy. In 1980-81 our total oil consumption was 30.79 million tonnes, consisting mainly of high speed diesel oil (33.5 per cent), kerosene (13.7 per cent), fuel oil (24.1 per cent), naphtha (7.5 per cent), and motor gasolene (4.9 per cent). The projections for petroleum consumption for the Sixth Plan (1980-85) and for 1989-90 are given in Table 2.

Table 1 : ONGC's planned production

(Million tonnes)

(1) Offshore production

Year	Sixth Plan	Accelerated plan
1981–82	8.4	8.5
1982–83	11.8	13.95
1983–84	12.7	16.67
1984–85	13.2	19.12
Total	46.1	58.14

(2) Onshore production

Year	Western region	Eastern region	Total
1981–82	3.7	2.2	5.9
1982–83	3.4	2.6	6.0
1983–84	3.1	3.0	6.1
1984–85	3.1	3.0	6.1
Total	13.3	10.8	24.1

Even though the scope for conservation of oil in a developing country like ours may not be as much as in advanced countries, still there is considerable scope for reducing consumption of diesel oil, fuel oil, kerosene, light diesel oil, naphtha and other products. Pricing of petroleum products has some effect on inter-fuel substitution and also on checking consumption. The recent increases in domestic petroleum prices have to be partly viewed in this context. While the decision-making on the supply side of oil lies with the government agencies, the decision-makers on the demand side are numerous households, industries, transport operators, etc. The Government can only prod and encourage them through appropriate policy measures and other steps to economise oil consumption. Insufficient availability of coal, power and suitable technologies for substitute fuels, delay on the part of railways to effectively replace road transport in respect of long distance movement of goods and passengers and absence of adequate incentives for energy-saving equipment and processes are among the major negative factors encouraging oil demand.

Product-wise, the largest increase in consumption during 1970-81 was in the case of high speed diesel (169 per cent), fuel oil (59 per cent), naphtha (157 per cent), domestic cooking gas (126 per cent), and aviation fuel (64 per cent). The demand for petrol rose only by five per cent, kerosene by 28 per cent and light diesel oil by three per cent during the same period. It may be mentioned here that the Petroleum Conservation Research Association under the Department of Petroleum is engaged in conducting surveys and case studies and in disseminating useful information to end users on measures to conserve oil.

The average annual growth rate of petroleum consumption anticipated during the Sixth Plan is 7.7 per cent and for the next five years (1985-90) 6.4 per cent. Among the products with relatively high

Table : 2 Projected demand for petroleum products (million tonnes)

Year	Total consumption
1980–81	30.79 (provisional)
1981–82	34.74
1982–83	37.34
1983–84	40.17
1984–85	42.83
1989–90	62.55

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IF YOU are responsible for paying any
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You are liable :
- ★ to deduct tax at the appropriate rate therefrom.
- ★ deposit the tax deducted to the credit of Government within the time allowed.
- ★ file the appropriate statement with your I.T.O., indicating the deduction made.

Meet your liability well in time
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For further details and guidance approach your I.T.O. or the P.R.O. in the office of the Commissioner of Income-tax.

For attention of recepient

If you are in receipt of any income from the sources mentioned above and your total income justifies deduction of tax therefrom at a lower or NIL rate, you can approach your I.T.O. for a certificate showing such lower rate applicable to you and the person paying the income will then deduct tax only at that rate.

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The rapid industrialisation and urbanisation that accompanies economic growth are bound to increase energy use, ncluding that of oil. However, attempts have to be made to minimise the use of oil on a product-to-product basis. The areas where checks could be applied are transport sector (diesel oil), agriculture (light diesel oil), industries (diesel oil and fuel oil) and household sector (kerosene). The transport sector, in particular, needs a complete change in priorities because high speed diesel, which is mostly consumed by this sector accounts for around 33 per cent of total consumption of oil and because it has the highest rate of growth. Large scale electrification of railways and greater emphasis on passenger and goods traffic by rail can reduce the diesel consumption substantially.

Our dependence on oil imports will continue to be significant in the immediate future. But, with the acceleration in production programme, imports of crude oil and products as a percentage of total demand of petroleum products should decline from the current level of about 70 per cent to about 47 per cent in 1984-85. But the trend can reverse if we slacken our efforts in regard to exploration and demand management.

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Special Reports

Financial needs of private industry

From P. C. MAHANTI

CALCUTTA

FINANCE for the private sector is an engaging subject, for the private sector is still responsible for the major part of the economic activity in the country. A study such as the one the Indian Chamber of Commerce has made on the financial needs of private industry, in the context of the Sixth Plan development programme is, therefore, to be welcomed. The study begins by pointing out that this sector has been assigned a bigger role in industrial development during the Sixth Plan than with previous one. It is required to invest in mining and manufacturing some Rs 15,182 crores. Rs 19,582 if the shares of the co-operative sector is taken into account. The non-financial services are also thrown in.

Investment in mining and manufacturing (including small and village industries) in the past has been nearly one-third of the total private investment. The ratio would go up to 41 per cent in the Sixth Plan. The following is the broad pattern :

(In crores of rupees at 1979-80 prices)

Industry group	Total
Mining	25*
Metallurgical	1,244
Engineering	2,463
Chemicals	3,920
Consumer Industries	5,375
Miscellaneous	2,155
Total	15,182

* Excluding captive mining which is included under respective industries.

On the above basis, the average annual private investment in industry works out to Rs 300 crores — just double of the current rate of investment per year in private industry. But far from enabling the private sector to raise the level of its investment, even the current level cannot be maintained if the constraints mentioned in the study are not removed.

Explaining how paucity of finance, both for working capital and for new investment, has been one of the major constraints for expansion as well as for the creation of new capacity, the study points to a number of factors that are posing problems: financial needs are increasing yearly due to continuing inflationary pressures and the rise in costs of new project. Investment costs in India have been rising at rates ranging from seven per cent to 13 per cent in key industries such as sugar, cotton textiles, steel, aluminium, fertiliser, paper, cement etc. In the last five years the project costs have almost doubled. The study gives the following examples. A sugar project of 1,250 tonnes capacity costs Rs 6.5 crores today as compared to Rs 3.5 crores in 1973; the capital cost of a cement plant is around Rs 720 per tonne now as against Rs 450 per tonne in 1974; a mini paper plant costs Rs 5,900 per tonne compared to Rs 3,800 per tonne only four years ago. Moreover, industries will face substantial resources gap for financing replacement costs during the current decade ranging from 20 per cent to 70 per cent.

Against this background of a high investment target and falling generation of internal resources in industry, a sluggish capital market and increasing difficulties in borrowing from financial institutions, the study examines the nature of the task facing private industry for fulfilling the allotted Sixth Plan development programme.

The fact that external sources now provide the major part of the funds for private industry is adequately brought on with a full statistical picture of the sources from which finance comes. Share capital has become a diminishing source while bank borrowings have become the largest, as table 1 shows.

Internal sources like reserves and surplus and provisions for depreciation and taxation contribute less than 22 per cent of the funds employed in industry today. The study also points out that the corporate sector's retained profits available for plough back show a declining trend. Between 1970-71 and 1977-78 retained profits fell from Rs 167 crores to Rs 154 crores. The retained profits as percentage of profits before tax declined sharply from 31.2 in 1970-71 to 17.2 in 1977-78. The table below gives some indication of how the internal resources of companies have been steadily taxed away :

	1970-71 (1,650 companies)	1977-78 (1,720 companies)
	(Rs crores)	
Profit before tax	536	896
Tax provision	223	515
Profit after tax	313	381
Dividends	145	228
Retained profits	167	154
Tax provision as % of profit before tax	41.6	57.5
Profit after tax as % of net worth	11.7	8.9
Profit retained as % of profit before tax	31.2	17.2

Table I : Source of funds for private industry

Source	Funds from different sources as % of total funds employed		
	1975-76	1976-77	1977-78
Share capital	16.9	16.9	16.6
Reserves and surplus	17.9	17.1	16.7
Provisions	6.1	5.6	5.3
Borrowings (of which from banks)	35.0 (18.9)	35.4 (19.2)	35.3 (19.0)
Trade dues and other current liabilities	24.1	24.9	26.1

The high level of taxation apart, two other factors which are cutting deep into the internal resources of companies are controls and wrong pricing policies and historical cost principle of depreciation. Industries can build internal resources if the level of corporate taxation is reasonable not at the predatory levels prevailing at present. A pricing policy for controlled industries which ensures a reasonable return on capital employed and a depreciation allowance on the replacement cost principle is also essential.

Even if the Government acts on the above suggestions, private industry would still need to fall back on external sources for the major part of its financial needs. The changes would take time to yield the derived result. But the capital market is sluggish and not in a position to resume its old role in financing industrial development or growth. The share boom gives a completely misleading picture of the state of the capital market, for the boom centres round the shares of old and established companies. The new issues market is not faring well at all. Convertible debentures are proving attractive to the investors, but the interest will not be sustained unless a secondary market also develops. As for the ordinary stock, the yield on equity has to be much more than 6 per cent, the average rate of return available today and the banks must lend against shares to improve their liquidity. A third way is to raise the tax free exemption limit of investment in shares from the present Rs 5,000 to something like Rs 15.000. Yet another suggestion is that capital gains tax should not be levied when capital appreciation in share values is invested in shares again. The private sector must be allowed to set up investment trusts or mutual funds on the lines of the Unit Trust of India and efforts should be made to expand the market for equities beyond urban centres. Public deposits have become a useful source of finance but limiting the interest payable to 15 per cent is limiting the flow of funds, as more attractive alternatives are available.

Bombay spot exchange rates of currencies as on 24-8-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.60	9.80
Austria	A. Schilling	190.00	196.00
Belgium	B. Franc	443	452
Canada	C. $	13.34	13.86
Denmark	D. Kroner	85.80	87.10
France	Franc	65.50	66 70
Hong Kong	H.K. $	65 10	67.30
Italy	Lira	13.690	13,880
Japan	Yen	2510	2560
Malaysia	M. $	26.20	27.00
Netherlands	Guilder	30.30	30.80
Norway	N. Kroner	67.70	68.90
Singapore	S. $	23 90	24.60
Sweden	S. Kronor	58.10	59.10
Switzerland	S. Franc	23.60	24.10
UK	£	5.9600	6.0110
USA	$	11.14	11.34
West Germany	D.M.	27.10	27 60

Term lending institutions, a substantial sources of finance these days, are themselves experiencing a shortage of finance. Between 1971-72 and 1979-80, these institutions raised their assistance from Rs 191.4 crores to Rs 1,203.8 crores. By the end of March 1980, they had invested some Rs 613 crores in company shares. With the constraint of a funds shortage developing in their own resources, these institutions have been inclined to impose more stringent conditions. The present debt-equity ratio is an unhelpful factor, a high rate of promoter's contribution is another; yet another is the high rate of interest charged. And institutional underwriting for medium scale projects with investments up to Rs 2 crores is simply not available.

The study suggests that the debt-equity norms need further liberalisation, especially in the case of projects with high capital intensity and a high import content. Interest on term loan should be kept down to a reasonable level and the conversion clause should be totally removed.

To the subject of bank finance, appropriately large space is devoted. It is by far the most important source of working capital, for some almost the only source. As it is now sought to reduce bank credit to industry further considerable difficulties is apprehended. If the Chore Committee's recommendations are accepted, credit restrictions will become even tighter. Between March 1968 and June 1980, the share of large and medium industry in total bank credit fell from 60.6 per cent to 38.2 per cent and that of wholesale trade other than food procurement from 14.2 to 9 per cent. At the same time, the cost of credit has been raised progressively — Bank rate from 5 per cent to 9 per cent and then to 10 per cent, and the commercial bank's advance rate from 7 to 8.5 per cent up to a maximum of 19.5 per cent. In view of various restrictions on bank credit, additional advances to industry have declined from Rs 1,042 crores in 1978-79 to Rs 1,019 crores in 1979-80. Table 2 summarises the position.

Table 2: Bank credit

	Outstanding June 1978	Outstanding June 1979	Variation over the year	Outstanding June 1980	Variation over the year
Industry (medium and large).. ..	6,249 (39.2)	7,291 (37.7)	+1,042	8,310 (38.2)	+1,019
Gross bank credit	15,960 (100.0)	19,343 (100.0)	+3,383	21,749 (100.0)	+2,406

Note: Figures in brackets are percentages to total gross bank credit.

The study stresses that quantitative restrictions on bank credit will lead to contraction in industrial activity in face of the current inflationary rise in operational costs. Considering the implication of a serious credit squeeze, the study suggests that the Chore Committee's recommendations be postponed until a fresh review of industry's credit requirement is undertaken. It is also suggested that interest rate on advances should be reduced and in view of rising project costs, the CAS cutoff point should be raised from Rs 2 crores to Rs 5 crores.

The study makes a strong case for the private sector in India to borrow abroad in a big way. Considering the huge volume of funds now available in the international capital market it should not be difficult to attract part of this money. The Arab funds in particular can be attracted by suitable inducements such as high returns and tax concessions. The Eurodollar market also has been lending substantial funds to developing countries especially Brazil, Mexico, Venezuela and South Korea, and India will certainly qualify as a good risk considering its own record in the matter of repatriation of dividends on foreign investment in the country and of principal as well.

The study ends by summing up its earlier recommendations on taxation, credit policy, monetary policy, and the revival of the capital market, but has nowhere stated how much of the required investment under the Sixth Plan, private industry will be able to raise on its own and how much it will have to find from outside sources. To balance the contents the study should have given a list of incentives and reliefs available for new industries or expansions in selected sectors and areas and how these help capital formation in the private sector.

'Better trade than aid'

BOMBAY

WEST Germany's budget will increase by 4.2 per cent and its developmental assistance by 7 per cent in 1982, the Federal Minister of Economics, Dr Otto Graf Lambsdorff announced here while addressing the Indo-German Chamber of Commerce at its twenty-fifth anniversary celebrations. He said, India received the largest share of development assistance from the Federal Government, which it would try to maintain. But he made no secret of the fact that there were substantial hurdles in the way of gaining political approval for such a high level of funding for development assistance.

Lauding the role played by the Indo-German Chamber of Commerce, the first German chamber of its kind in Asia, in promoting trade between the two countries, Dr Lambsdorff said that bilateral trade had nearly doubled in the past five years. For some years now, a number of dynamic developing countries have been offering goods on international markets. In terms of quality and technology these goods are thoroughly capable of competing with comparable product from traditional industrial countries. India is increasingly taking its place as a member of this group.

In fields which were less technology intensive—the textile and garment industry or footwear and leather goods manufacture, for instance—a number of developing countries had carved out a solid share of the world market years ago. In the wake of this development, affected branches in the industrial countries had to undergo and were still subject to adjustment processes which were not without some pain. Tougher international competition among the industrial countries themselves had also caused serious structural changes. Dr Lambsdorff said that there was absolutely no doubt in his mind that worldwide adjustment to these changed international economic patterns could only proceed under the conditions of an open system of world trade.

The temptation was great, especially in times of a downswing in the economy, to dodge the challenge by means of protectionist measures and by granting domestic economic subsidies to continue existence Dr Lambsdorff said. But India had resisted this temptation. Despite many difficulties, it had maintained the liberalisation introduced at the end of the seventies. In his opinion, this was the only path to take. In the short term, companies and employees would appear to be helped by protectionist measures. But in the medium term, disadvantages clearly outweighed apparent benefits. The fact that the western countries had, in principle, recognised this necessity was shown by the numerous international declarations and agreements in recent years. Most recently, the necessity was reasserted at the Ottawa summit.

Dr Lambsdorff said the topic of protectionism was of decisive importance in the relationship between the industrial and developing countries. Protectionism was the most formidable enemy of the integration of the countries of the Third World into the world economy. And this integration was a prerequisite for lasting success in remedying the disequilibrium between North and South. "Better trade than aid" was the principle which should guide efforts. For this very reason, the industrial countries should accept the challenge of foreign suppliers on domestic markets and on third markets without in advance setting up a wall of governmental protection.

Referring to the Multi-Fibre Arrangement, Dr Lambsdorff said that the West German Government was going to work for a limited extension of the Arrangement even though it could not serve as a lasting solution to problems and appeared as a element alien to the system of free world trade. He believed if the present Arrangement were to expire without renewal, the result could doubtedlessly be a number of national protective and retaliatory measures and would represent a serious test of the overall system of international trade, beyond the restricted area of the textile sector.

Dr Lambsdorff highlighted some of the problems of the least developed countries and said, despite all efforts, in the foreseeable future, it would hardly be possible to integrate them sufficiently into the world economy, even with a free international exchange of goods. An issue in these countries was not temporary sluggishness in growth or setbacks in prosperity; rather the problem was meeting elementary needs. Public assistance from the industrial countries must bear the main burden here.

Pointing out to the poor contributions to development assistance made by

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Aug. 21, 1981 over		
		Aug. 21, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.60	3.50	3.50	2.80	2.9	2.9	28.6
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Bajra	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Gram dal	Average	6.50	6.50	6.20	6.00	—	4.8	8.3
Tur dal	Average	6.80	6.80	6.50	5.60	—	4.6	21.4
Potatoes	Average	2.40	2.40	2.00	2.50	—	20.0	—4.0
Onions	Average	1.80	1.80	1.50	1.00	—	20.0	80.0
Milk per litre	Buffalo	6.00	6.60	5.00	4.30	—9.1	20.0	39.5
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	6.40	6.80	6.50	7.80	—5.9	-1.5	—17.9
Gur	Average	6.60	6.60	6.00	6.00	—	10.0	10.0
Groundnut oil	Average	17.50	18.00	15.00	11.25	—2.8	16.7	55.6
Vanaspati	Average	16.50	17.00	16.00	—	—2.9	3.1	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

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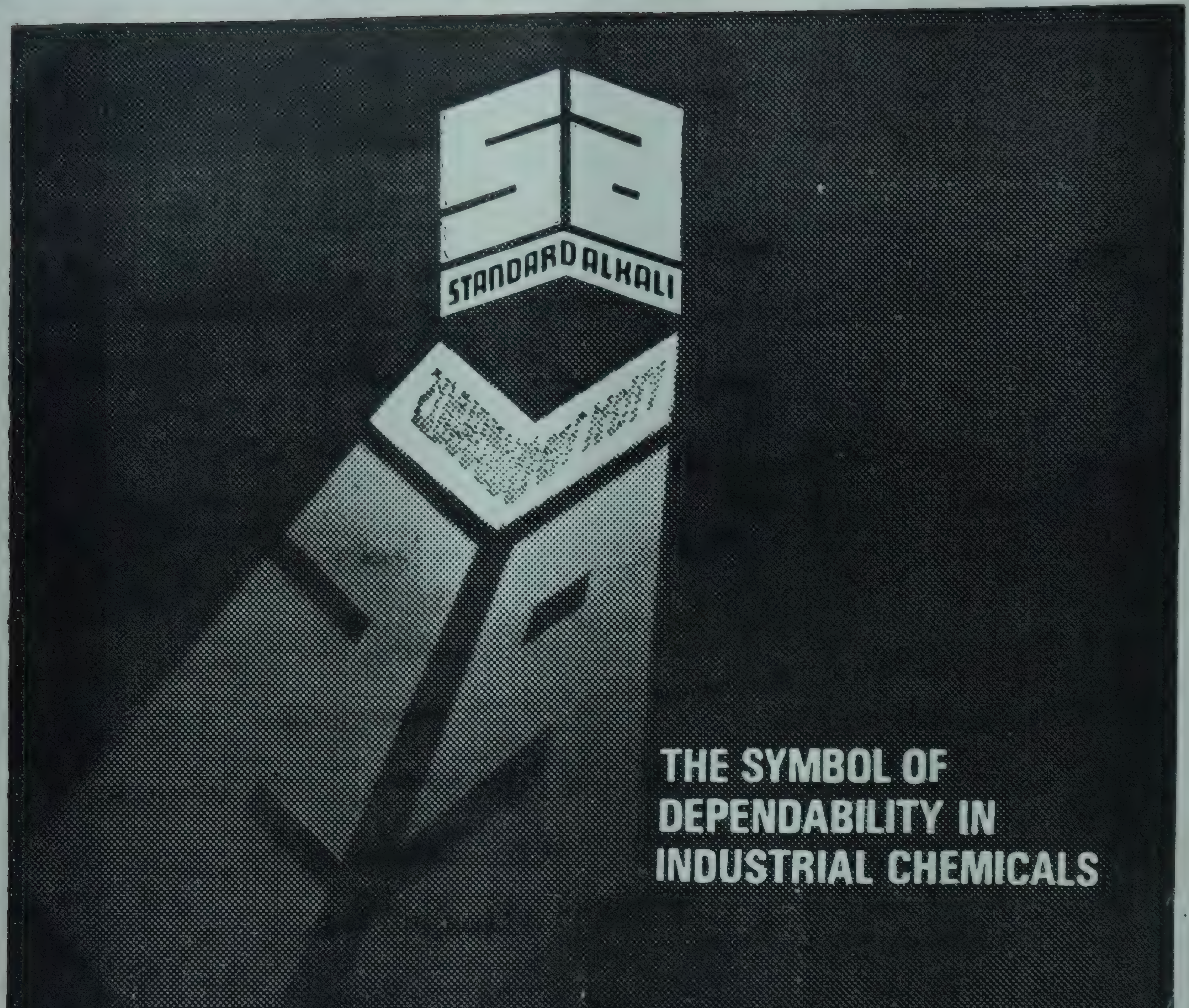

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East European countries, Dr Lambsdorff said that he regarded it as scandalous that the entire development assistance from the Eastern bloc did not amount to half of that provided by the western countries. Moreover, the assistance granted by these states was predominantly sent to only two developing countries—Cuba and Vietnam. The western industrial countries should not hesitate, time and again, to point to this deplorable state of affairs, particularly within the forum of the North-South dialogue.

Commending the progress made on certain issues at the conference in Cancun, Dr Lambsdorff said that too much should not be expected of such conferences and there should not be any illusions. As if hypnotised, the international discussion was fixed on the level of development assistance granted. But these funds could only play a secondary role. The entire amount of development assistance granted last year by the industrial countries of the west was not even enough to cover the increases in oil expenditure of the developing nations, he reminded.

Describing efforts made by the West German Government to promote imports from developing countries, Dr Lambsdorff said that, import restrictions, of whatever sort, were not in harmony with the principles advocated by the Federal Republic of Germany. By providing information and consulting services, the West German Government even promoted imports from developing countries on a not inconsiderable scale. On the export side, direct subsidies clash with the principle of worldwide competition of products with as little distortion as possible. The Federal Republic, therefore, believed in governmental promotion of exports only where it appeared necessary and effective. He said that the West German Government was ardently attempting within the consensus of the OECD to eliminate measures which distort competition, measures especially used by some high interest countries.

Dr H. Langer, president of the Indo-German Chamber of Commerce said that, Indo-German co-operation had come a long way since the modest beginnings of the early fifties. As compared to 1956, the volume of trade had grown two and a half times, the number of joint ventures ten times and the number of licence agreements several hundredfold.

Carpets: Competition from China

From O. N. KOUL

SRINAGAR

IT is high time for the Kashmir Government to realise the urgency of enforcing a rational price based on a reasonable margin of profit for all the commodities which have a wide national and international market. Unless this is done, the State's famed carpet industry and also the fast growing hops industry are bound to come to grief sooner than later.

Take the case of carpets. The dealers and the authorities revelled till last year that the wool carpets and silk carpets were fetching a price of up to Rs 300 and Rs 700 per sq ft respectively in the international market. Nobody bothered about the fact that these prices were based on a profit margin of 100 per cent or more. Unconcerned about the repercussions, the traders and the authorities received a rude shock this year with the discovery that the high priced Kashmir carpets had no buyers in the recession hit European markets which had already been stuffed with high quality and low priced silk carpets from China and Turkey and continued to be supplied with better quality wool carpets from Pakistan.

Shaken at the dismal prospect of the State's carpet industry, which was given a big boost to make up for the gap of about Rs 700 crores created in the international market by the fall in production in Iran, the authorities decided to purchase carpets worth Rs 5 crores from the actual producers. But, the problem remained of the price. After prolonged deliberations by an official committee, headed by the state-owned Jammu and Kashmir handicrafts export corporation chief the price was fixed at about Rs 140 per sq ft in the case of wool carpets and up to Rs 280 for various categories of silk carpets. It is presumed that these prices were fixed after allowing a reasonable margin of profit to the weavers. That being so, the fact that the prices that ruled till last year were unreasonably high and were sustained because China had not entered the international market stands established, the moral being that the state's carpet industry employing over two lakh people cannot be left to the mercy of profit-hungry traders who, incidentally, continue to handle at least 90 per cent of the state's carpet exports which were of the order of Rs 25 crores for wool carpets and Rs 7.75 crores for silk carpets in 1980-81.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on Aug. 17, 1981)

	High	Low	T.T.
Australian $	6.76	6.68	6.9085
Belgian Franc (100)	14.00	13.00	14.545
British £	10.80	10. 60	10.790
Burmese Kyat (100)	25.00	15 00	
Canadian $	4.86	4 80	4.93
French N.F.	0 99	0.955	100 00
Indian Rupee (100)	58 00	53.00	66 65
West German DM	2.37	2.325	2.3840
Indonesian Rupiah (100)	0.90	0.80	
Italian Lira (100)	5.00	4.70	
Japanese Yen (100)	2.56	2.52	2.5815
Korean Won (100)	0.88	0.78	
Malaysian $	2.51	2.48	2.5500
Netherlands Guilder	2.14	2.09	2.1505
New Zealand $	4.85	4.65	4.9755
Pakistan Rupee (100)	4.30	3.80	6.175
Philippine Peso	0.72	0.69	0.7700
Singapore $	2.75	2.72	2.7815
South African Rand	5.70	5.30	6 8660
Sri Lanka Rs. (100)	30.00	22.00	
Swiss Franc	2.76	2.70	2.7545
Taiwan $ (100)	15.20	14 80	
Thai Baht (10)	27.50	25.50	

All those connected with the state's carpet industry would also do better to realise that they were in for stiff competition from within the country. The Badhoi belt in UP, for instance, is reported to have already established a loomage of 35,000. Its produce is stated to account for about 70 per cent of India's total current carpet exports of about Rs 100 crores. It is also stated that the Badhoi weavers have already started producing 16:16 knotted carpets, a feature hitherto unique with Kashmiri weavers. The cost of production, inflated in the case of Kashmir carpets mainly by the wage component, is also less in Badhoi. True, Kashmir weavers remain masters in the production of silk carpets. But, this field is faced with acute raw material problems besides competition from China. However, it is alleged that the Kashmir exporters have been managing to send out silk carpets under the name of wool carpets to corner the 20 per cent subsidy available on the latter against only 10 per cent on the former. While this allegation can be looked into by the authorities concerned, the State Government should ensure that carpet pricing remains rational so that the industry does not face extention.

In the case of hops, the import of which has already been banned by the Government of India and for the production of which Kashmir valley has

Money

Brave new world of banking

BANKS are at cross-roads. Most of the problems they and their customers face are those of a transition period. This is how most bankers defend the state of customer service today. They imply that in due course, when the banks settle down to their present role, the problems will disappear and customer service will improve.

We may examine where this transition should lead us and what is the brave new world of banking that is in store for us. One single area in which some thing new is expected is the job content of a banker's daily tasks.

Banks recruit clerical staff numbering 30,000 every year. They are selected from the best, after tough tests and competition. They are grilled through the most modern selection system. Obviously the selected material is of a very high calibre. Bank jobs pay well, are relatively lighter in burdens, promotion opportunities are early and many, and are very attractive. They attract the best of the clerical talents in the country.

There is no wonder that these people get frustrated as soon as they enter into the banks. Despite their talents and calibre the jobs they have to perform make very few demands on their intelligence or calibre. As clerks they carry no responsibility. There is no obligation on them to do their work correctly and accurately. In fact there is no obligation on them to do any work at all. And in any case, the work that they may do is to post and cast figures, copy them from one book to another.

More than these, the two major shortcomings of their jobs are that they do not have to take any initiatives on their own, and they do not have to understand the significance and implications of the jobs they do. They just do what they do or sometimes have to do, without going into the reference and context of their jobs.

In the brave new world of banking after the transition, all this has to change. The best way to utilise the talented recruits and to get the best out of them, the most effective way to motivate them and to divert their energy towards creative use is to give them responsible jobs and total responsibility for getting results.

In banking industry, the supervision, checking and double control system works against such a goal of giving more responsible and responsive tasks to the clerical cadre. Somebody must do and somebody else must check. Yet in practice no one checks and just signs. Yet bankers cannot get rid of their mentality to use double controls. So much so that some foreign banks actually sign even acknowledgement letters with two signatures!

In the new world of banking there should be only one cadre of doers only and there is no need for two—that of doers and checkers. There is of course the need for accuracy and correctness in all bank's accounts. But it does not follow that the existing checking and supervision system ensures that accuracy and correctness. On the contrary, it discourages both the doer and the checker from performing their tasks. They actually try to pass on the responsibility to each other. On the other hand, self-supervision and responsibility on the same person will ensure that he takes initiatives, does his work, develops talents and resources to do it better and that understands the effects and implications, consequences and results of his actions, duties and tasks.

This is not such an unusual or revolutionary idea as to invite resistance or opposition. There are checks and balances within the accounting system and strategic controls within the management system that would enable a single point responsibility for accuracy and reliability of accounts to be counter checked. And they would give better results than the present 100 per cent checking system where checking is not 100 per cent and responsibility is nil.

S. G. Shah

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emerged as the only suitable place, thereby, bringing considerable fortunes to the growers, the state government appears to be unreasonable insofar as the procurement price is concerned. A circular issued by the state agriculture ministry to the breweries, which use hops for manufacturing beer, says that the state-owned Agro-industries Corporation has decided to procure green hops at Rs 11 per kg and advises that in no case should the price paid to growers be less than Rs 10.60 per kg, the price announced, interestingly about a fortnight earlier by the Mohan Meakins.

There is no disputing the norm that the growers should receive a remunerative price. But, the authorities need to realise that it cannot be unreasonable to drive the breweries to resort to the use of hop extracts or concentrates, the import of which has not been banned. The scientists at the Regional Research Laboratory here, who pioneered the cultivation of hops in the Kashmir valley, testify that the cost of production per kg does not exceed Rs five. Allowing for a high margin of 50 per cent, the procurement price could be fixed at Rs 7.50 per kg of green hops. That, incidentally, was the price in 1979. It rose to about Rs 10.25 in 1980. A rise of 40 per cent in three years may not appear very high in the prevailing inflationary situation in the country as a whole. But, the fact that the prices are based on more than 100 per cent margin does pose a threat to the future of this newly developed agro-industry.

Because of the exceptionally high returns from the cultivation of hops, more and more areas are bound to come under this crop. In a number of places, farmers have converted paddy fields and apple orchards into hopyards. The trend is bound to continue. The area under this crop this year doubled to 300 hectares as compared with the last year. The production this year is estimated at 2,000 quintals and next year it may go up by another 1,000 quintals. With the country's requirement estimated at about 3,000 quintals, what will state government do when it is faced with production glut? After all, hops are rendered useless within a few hours of being picked. They have to be dried instantaneously. Will the state government rescue the farmers with its total drying capacity of six quintals per shift? What if the brewers and some local entrepreneurs, together accounting for a drying capacity of about 150 quintals per shift, refuse to co-operate in protest against unreasonable procurement price? Will the kilns be taken over? If so, who will operate them? And, can it be done in disregard of the actual user's goodwill? The moral is simple: the price must be remunerative for the grower and reasonable for the user if the industry is to survive.

ENGINEERING

Shortage of raw materials

MADRAS

THE engineering industry is experiencing difficulties in obtaining raw materials such as pig iron, plates and structurals, and the Association of Indian Engineering Industry (AIEI), Southern, Region, highlighted some of these difficulties at a meeting here with the Steel Authority of India Limited (SAIL) representatives. According to AIEI, only two rakes of pig iron reached Madras in the past four months, against 10,000 tonnes last year. What is required is at least one rake load of pig iron for Madras every month, it says.

Low availability of pig iron this year is due to lower production, even though overall steel production has improved this year. Production rate of pig iron has fallen to less than 90,000 tonnes per month against a normal production of 1,20,000 tonnes. Even imports of pig iron under OGL have not improved availability because 40 per cent import duty makes the landed price prohibitive. Yet, there is a proposal to import 1,50,000 to 2,00,000 tonnes of pig iron to meet the shortage.

AIEI representatives asked for a change in the present distribution system of pig iron which is based on the average consumption for three specified years. It suggested instead that allocations be based on the best of the three years consumption. Another lacuna in the distribution system is that while new units are alloted 20 per cent of their licensed capacity, this facility is not automatically available for capacity expansion by old units. AIEI has, therefore, suggested that the present cut-off date, *i.e.* capacities registered up to June 30, 1979, be deleted and allocations permitted on the basis of capacities registered beyond that date also on the basis of additional capacities created in old units.

SAIL representatives also made it clear what they expected of the industry. They pointed out that steel arrivals to the southern region in the last three months averaged 60,000 tonnes per month. Since the basic demand for steel was comparatively lower, the demand did not always constitute movement of a rake load. Industry should, therefore, consider pooling

As I see it

Resettlement of ex-servicemen

THE Government of India has announced reservations of a certain percentage of posts for ex-servicemen. Like many other reservations, the reservation of posts for ex-servicemen also has remained largely on paper. The actual employment of ex-servicemen achieved against reserved vacancies was only 1.3 per cent on the average in Central Government offices and Central public undertakings. There was a shortfall in filling reserved vacancies even in public undertakings under the Ministry of Defence itself. Explaining this failure the Director-General, Resettlement (DGR) referred to the existence of militant trade unions which put pressure on the management to employ dependents of employees and absorb casual labour.

The Ministry of Defence did not bother to preserve the record of the number of ex-servicemen employed in para-military forces, despite the fact that the government departments were called upon to forward quarterly returns to the Director-General, Resettlement, showing the number of ex-servicemen appointed during this period. That was how initially the Ministry of Defence pleaded its inability to produce the record to the Estimates Committee. Subsequently the Committee was informed that statistics had in fact been received by the Director-General, Resettlement in respect of para-military forces except in the case of the Border Security Force (BSF) which had stopped sending returns in 1976.

The Estimates Committee worked during 1980-81. It means that for five years nobody in the Defence Ministry had bothered much about the progress in the resettlement of ex-servicemen. Otherwise the non-reporting by BSF could not have gone unnoticed for so many years.

There was apparently near-total neglect of ex-sailors of the Indian Navy in the recruitment of seamen for the merchant navy, which in five years had taken just 13 ex-naval ratings, notwithstanding the decision taken by the Seamen's Employment Board that ex-naval ratings, who are demobilised after completing their term of service satisfactorily, might be considered for absorption in the merchant navy on merit. The level of employment of ex-Indian Air Force men in the government departments was again very low. Only 0.7 per cent of the retired airmen got jobs in 1977, 1.2 per cent in 1978 and 1.3 per cent in 1979. The low employment of ex-IAF men was all the more remarkable, since airmen in general did not suffer from the disability of not being properly educated, unlike many members of the army.

There is a system of pre-release training of outgoing defence personnel. There are 105 courses for ORs and 24 courses for officers. However, the scheme has been very indifferently implemented. As against the target of training 70,000 defence personnel of all ranks retiring every year, prerelease training was organised for less than 2,900 personnel (400 officers and about 2,500 junior commissioned officers (GCOs) and jawans) during 1979-80. What comes out of these figures is that while 40-45 per cent of the officers get some sort of training before retirement, the number of JCOs and ORs getting such an opportunity does not come to more than 5 per cent of those retiring in the categories.

The Estimates Committee of the Seventh Lok Sabha did not find acceptable the explanation of the Ministry that a sufficient number of ORs were not volunteering to fill up the available vacancies. In fact the Director-General, Resettlement stated that the basic reason for the inadequate response of the ORs was the fact that ORs had to obtain the clearance from their commanders to join training and that such clearance was not freely forthcoming. This fact needs to be considered by the Government as it involves the resettlement of more than 70,000 defence personnel every year.

Subhash Chandra Sarker

BUSINESS OPINION

DR R. R. Hattangadi, chairman, Ion Exchange (India) Ltd : "While until now we have been indirectly concerned with energy, helping in power generation or in saving energy through efficient processes using less power and chemicals ... we shall be directly entering the business of harnessing a form of solar energy especially relevant to India *viz.* through renewable biomass. The first aspect we shall commercialise is by densifying wood waste into briquettes whereby it is possible to produce non-polluting solid fuel with a calorific value of 15,300 kcal/kg, superior to non-coking coal normally sold in India for industrial use. We believe the potential market for such briquettes is enormous in view of the foreseeable shortages of LPG, kerosene and fuel oil.

"The Government should give priority to growing fuelwood on the more than one hundred million acres of denuded land that exist all over India. Fuelwood or energy plantations would supply the fuel needs of the rural populace, 80 per cent of which are now met from existing forests. But forests are required for the essential insurance they provide to agriculture. Growing fuelwood would also create many rural jobs. Since fuelwood can be grown all over India, it need not be transported (over) great distances. The revegetation of all barren land will greatly improve the hydrological balance, as forests act like giant sponges, and enable the productivity of agriculture which is dependent on water to be greatly enhanced.

MR Harishankar Singhania, chairman, J. K. Industries Ltd : "High prices of natural rubber and its shortage is a matter of great concern to the industry. The prices for RMA I grade have touched an all-time high of Rs 1,740 per quintal as against the floor price of Rs 825 per quintal fixed by the Government. Even at these prices, the availability of rubber is poor. It is essential that adequate quantities of natural rubber are imported into the country on a regular basis, not only to meet the gap between supply and demand but also to keep a check on the exhorbitant increase in rubber prices.

"Other raw materials such as synthetic rubber, carbon black and rubber chemicals have also registered sharp price increases. Consequently, selling prices of tyres had to be increased though not to the full extent."

MR M. D. Dalal, chairman, The Hindustan Commercial Bank Ltd : "During the first half of the year 1980 the banking industry suffered a setback due to economic situation which continued to be constrained by droughts in different parts of the country, continuing infrastructure problems like shortfall in power, coal, steel and cement and difficulties in transportation. However, from the middle of 1980 the economy was able to recover because of prospects of bumper harvest in the current year and the series of measures taken by the Government to improve industrial production and promote exports. Inflationary pressures remained strong in the first two quarters of 1980, but decelerated significantly later on. Expansion of money supply was kept under control through judicious monetary and credit policy by the Government. This adversely affected the banking system in India. Aggregate deposits with scheduled commercial banks registered a lower growth at 14.9 per cent in 1980 as against 18.5 per cent in 1979. Similarly, bank credit to commercial sector was also lower at 13 per cent as against 14.7 per cent in 1979."

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their requirements to constitute a 'customer rake'. If plates were required in small quantities, allocations could be made against other stockyards in the region. They also emphasised the need for closer co-ordination between SAIL and allottees, so that for bulk allotments, materials could be moved from wagons direct on to trucks. Co-ordinated delivery would reduce steel arrivals at stockyards and minimise stocking problems. At the meeting a time-bound programme of refunds by SAIL was agreed to. The engineering industry was also asked to make realistic projections of steel requirements well in advance.

AIEI, Southern Region, also organised meetings at Hyderabad and Bangalore this month to consider the scope for increasing engineering exports to Hungary. Products identified for export to Hungary, were : air and gas compressors, springs for automobiles and railways, machine tools, bulb and lamp components, components of automotive engines—piston assemblies, cylinder liners, gaskets, steel forgings, power station equipment—seamless steel tubes, boiler feed pumps, gear grinding machines, thread grinding machines, numerically controlled special purpose machine tools, NC machine centres, telecommunications equipment and measuring instruments.

India has a growing adverse balance of trade with Hungary that needs to be corrected. Industrial co-operation between the two countries is substantial there being 23 joint ventures already in operation. Engineering industries here are keen on identifying more areas of possible collaboration between the two countries.

Dollar to strengthen?

CHICAGO

THE passage of the Reagan economic proposals is held as the most important economic legislation to pass Congress since the Second World War. The taxation and budget ideas will change the earning, spending and investing habits of Americans. The change will be slow at first but will accelerate in 1982 and 1983. By 1985, income tax will be indexed to inflation correcting what is known as bracket creep/processed by which individuals get into higher marginal income tax bracket wth higher nominal but unchanged real income. Although proposals of the economic programme are novel and untried, it is not difficult to judge the impact of the programme on inflation, interest rates and value of the dollar in the foreign exchange market.

As regards inflation, the rate of price increase has slowed significantly in the first seven months of this year. The producer price index has grown modestly while the consumer price index has grown at 9.6 per cent year on year. The widest measure of the change in prices, the GNP deflator grew at a modest 6.6 per cent in the second quarter composed to 9.6 per cent in the first. CPI would have grown slowly if the mortgage rates had not risen along with the general level of interest.

The outlook for inflation is towards further improvement as earlier declines in commodities as well as oil prices may influence producer prices for some time to come. However, the future is not as bright as the recent past. The Fed will be expanding the reserve and the money supply soon. The expansionary impact of the just passed tax cuts will be felt exactly at the time as the money supply begins to grow. If the economy does not have significant excess capacity at that time, inflationary forces will gather speed.

Interest rates will have a very rocky ride. Decline in interest rates may occur sooner than expected but may be very shortlived. Recent level of inflation does not justify present level of interest rates. However, the interest rates as such are not reflecting the inflation factor. Demand and supply of credit will become much more tightly balanced than it is at present. With the government borrowing needs exceeding 33 billion dollars in the fourth quarter and private demand for long-term credit unfulfilled during present high interest rate regime, long-term interest rates are not expected to decline. Even short term interests rates may experience some upward push as the money supply expands. Therefore, the course of interest rates will possibly decline at first and then an increase.

As regard foreign exchange much depends on what the market focuses on. If the attention remains focussed on interest rate differentials as well as the current accounts, dollar may continue to be strong for the balance of the year. However, the recent strength has already sown the seeds of ultimate future weakness. Trade account will deteriorate perhaps significantly. If high interest rates do not attract sufficient inflows of funds, current account could turn negative next year. If interest rates decline at the same time, dollar could come in for real trouble. The most likely scenario is for the dollar to strengthen between now and the end of first quarter of next year and then to weaken for a period of six months or so.

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	Aug. 1 1981	July 25 1981	July 4 1981	Aug. 2 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	274.0	274.1	273.7	264.5	—	0.1	3.6	29.1
Primary articles	272.8	270.5	261.8	236.2	0.9	4.2	15.5	31.0
Fuel, power, lubricants etc.	428.7	428.7	400.5	355.7	—	7.0	20.5	58.1
All commodities	286.6	285.7	279.5	260.4	0.3	2.5	10.1	33.0

Money and Banking (Rs crores)

	During the week ended				Percentage variation			
	Aug. 7 1981	July 31 1981	June 10 1981	Aug. 8 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,508	58,563	58,378	49,127	—0.1	0.2	19.1	37.9
Bank credit	26,843	26,779	26,598	21,986	0.2	0.9	22.1	37.6
Aggregate deposits ..	40,556	40,612	40,402	33,531	—0.1	0.4	21.0	40.7
Foreign exchange reserves(a)	4,856	4,856	4,856	5,099	—	—	—4.8	—14.5

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	June 1981	145 9(a)	145.5 (a)	0.3	14.0
Exports	Rs. crores	May 1981	383	627	—38.2	—15.7
Imports	Rs crores	May 1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May 1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	July 1981	4,856	4,856	—	—6.7
Wholesale price Index ..	1970-71=100	July 1981	283.7	278.3	1.9	13.6
Consumer price Index for Industrial workers ..	1960=100	June 1981	439	433	1.4	13.6
Unemployment(d)	Lakhs	Feb. 1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110,9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3.3	14.9
Imports	Rs crores	12,210	8,908	2,955	37.1	22.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)..*	Rs crores	55,221	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.8	217.6	139.7	18.0	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)** (lakhs) ..		162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(...) = Not available

BOOKS & IDEAS

Recent trends in public finance

Readings in Indian Public Finance

Edited by D. N. Dwivedi

Chanakya Publications, Delhi, 1981; *Pages* 264; *Price Rs* 70.

Fiscal measures have become the instrument of development finance in India. Our policy makers have been using fiscal policy consciously and consistently to meet various goals like creation of employment and rapid economic growth. Large public sector investments are being made in order to break the vicious circle of poverty. The Indian tax system is devised to co-ordinate revenue function and regulatory functions of the taxation with view to promoting growth with stability, reduce inequalities of income and wealth and prevent any further concentration of economic power Devoid of its philosophical idealism, in reality, the structure of Indian public finance has grown up haphazardly, influenced by historical factors and political vested interests with an agricultural bias, as tax burden on the non-agricultural sector has continuously increased, keeping agricultural sector relatively much undertaxed. The subject of agricultural taxation in India has raised a very controversial debate. The 'Under Taxation thesis' has been refuted by Prof. Lipton by proving that agriculture in India is overtaxed. Similarly Prof Raj Krishna challenges the 'intersectoral inequity thesis' of taxing agricultural sector. (p. 15). Other important issues of Indian public finance are the problem of direct *vs* indirect taxation, black money and Centre-state financial relations.

Intricate as the subject of Indian public finance is there is always scope for a good analytical work which can grapple with the current issues. The book under review is a compilation of some of the most important contributions to the study of Indian fiscal system by the country's eminent economists like Chelliah, Gulati, K. N. Raj, Raj Krishna, etc.

The book contains 11 research papers, and writings on the subject which had appeared earlier in journals like *Indian Economic Review, Arthvijnana,* and *Economic and Political Weekly.* It begins with 'An over view of India's fiscal policy' by the editor which is followed by K. N. Raj's paper on 'Direct taxation of Agriculture' where the author has examined the pros and cons of the agricultural holdings tax. The third article is on 'Intersectoral Equity and Agricultural Taxation in India' by Raj Krishna, in which the author has refuted the inter-sector equity thesis for additional agricultural taxation in India and argued that there is no convincing general case for heavier taxation of agriculture in the country. The present reviewer, however, is not in agreement with this view, as the inferences are made on the basis of chosen premises and there is no reason why rich farmers' income should go undertaxed.

The next article on 'The incidence of Indirect Taxation in India' by Dr Chelliah and Lal is a classic one on applied economics of modern incidence theory in the context of Indian tax system. The fifth article is by the editor Dwivedi on 'A buoyancy approach to the evaluation of excise taxation in India', a reprint form *Indian Economic Review,* which is followed by M. C. Purohit's paper on 'Buoyancy and Income-Elasticity of State Taxes in India' where the author seeks to examine the determinants of tax revenue explaining the variations in tax field. It has been observed that direct taxes on farm sector are inelastic while commodity taxes are more elastic. Further, development of state has a bearing on the income elasticy of taxes and revenue receipts.

Then there is an article 'On Black Money' by Sundaram and Pandit, in which the authors have pleaded for the elimination of controls that would convert black income into white, apart from the need for efficiently administered co-ordinated tax enforcement by the Government.

Then the editor has included an article by I. S. Gulati and A. Bagchi on 'A proposal for Reforming Corporation Tax.' in which the authors have suggested substituting .company taxation by the cost base in place of the present profit base. It is followed by the inclusion of some relevant excerpts on 'Value Added Tax' from the Report of the Indirect Taxation Enquiry Committee (1977) entitled as 'Long Term Reform of India's Indirect Tax Structure.'

The next paper 'On Deficit Financing' by D. S. Swamy has its own merit of presenting a static and a dynamic macro-economic model to prove that the proportion of budget deficit financed by money creation is a crucial determinant of the rate of price inflation. Last but not the least, Prof Raj Krishna's note of dissent to the Report of the Seventh Finance Commission has been included by the editor.

Evidently, the various papers compiled by Dr Dwivedi cover adequately recent trends in the literature on Indian public finance. No doubt, this volume will prove to be a useful reading to the serious students of public finance, as well as to the policy makers.

D. M. Mithani

In Brief

India-US Business Council

(*Sixth Annual Meeting*), *Brochure published by US-India Enterprises, P.O. Box* 10175, *Towson, Maryland* 21204, *USA; Price* $3.

US-India Enterprises, of which Mr Hasmukh Shah is the president, brought out this attractive brochure on the occasion of the sixth annual meeting of the India-US Business Council held in Washington on June 22-24. As Mr Shah has said the United States of America is India's largest trading partner and ranks among India's leading suppliers and is, in turn, the leading world market for India's exports. The India-US Business Council's meetings have thus a significance of their own for the council has been formed specifically with a view to promoting trade between the two countries and developing better economic relations. This short souvenir (brought out in co-operation with *Embassy News,)* carries a message by Mr K. R. Narayanan, Ambassador of India, who refers to the immense potential for increased trade between India and the USA, a trade which had already reached a figure of $2.6 billion in 1980. However, as Mr Narayanan points out India had an adverse balance of trade of $600 million, which suggests that the Business Council will have to explore ways to increase India's exports to the USA. The souvenir carries articles by distinguished Indians and Americans including Mr Orville Freeman, Mr Arvind N. Lalbhai, Dr Bharat Ram, Mr H. S. Singhania, Mr Kantikumar R. Podar, Dr Freddie F. Mehta and Mr Prakash Shah, who is the vice president of the American Express Bank.

Data Bank Series, May 1981

Man-Made Textiles Research Foundation, Resham Bhavan, 78, Veer Nariman Road, Bombay 400 020; printed pages 23; Price not quoted.

The May 1981 issue of *Data Bank Series* brought out by Man-Made Textiles Research Foundation provide data on the developments in the man-made fibre industry at home and abroad, exports, imports and prices in a capsulized form. Those who are associated with the industry will find this service of immense use.

Top, Topless & Top-heavy

by V. V. Raman

Published by Young Man & Co., 888 Nai Sarak, New Delhi 110006. Paper Bound Rs 12.50.

The publisher's blurb glibly states that it is a witty but vibrant book, a tearing probe into the three styles of management named in its title according to their cult, culture, and business behaviour.

It claims to be a breezy satire, but unfortunately it seems to have fallen flat on the reviewer.

"Economy measures are to be emulated first by the top echelons to have any impact on the organisation. If parents are prodigal, how can they check on their poor children?" is a sample of the so-called pithy sayings.

The saving grace of the book is cartoons on every page, double the size of the reading matter.

Feroze Wadia

A provocative analysis

IN a review article *World Food Programme News* says that a recently published book, *Food for war—food for peace: United States food aid in a global context,* by Mitchell B. Wallerstein (Cambridge, Massachusetts, MIT Press 1980) is likely to be of great interest to those concerned with food aid. The giving and receiving of food aid result from a closely interwoven latticework of considerations, motives and decisions within and among donor and developing countries. How food aid has evolved into a significant form of development assistance is a complex subject, requiring a careful examination of all the elements within its framework. This is what Dr Wallerstein has endeavoured to do. As he points out, "although much had been written on the general issue of food aid, no comprehensive analysis had been conducted regarding the political considerations, interests and objectives that have shaped global food assistance efforts, since World War II. This study attempts to fill that gap."

"The book examines the evolution of United States food aid, describes the activities of other bilateral and multilateral food-aid programmes, analyses the foreign policy objectives of United States food aid between 1961 and 1976 and finally presents the arguments both for and against a greater multilateral channelling of food aid through the United Nations system.

"Understandably, much of the book concentrates on the evolution of United States food-aid policies and programmes. Although it makes reference to the food-aid programmes of Canada, Australia, Japan, the United Kingdom, France, the Federal Republic of Germany, Denmark, Sweden, Norway, Switzerland, Italy, Belgium, the Netherlands and the European Economic Community in the context of the book's central theme, these are necessarily briefly described. For those interested in the origins and evolution of multilateral food aid, there is an interesting chapter on the World Food Programme which contains an intriguing account of the interplay of forces that led to its establishment.

"In a book which attempts to cover such a wide spectrum, there are strengths and weaknesses in coverage and analysis. More might have been said about the comparative advantages and disadvantages of different forms of food assistance, particularly bulk-supply, programme-type food aid as provided bilaterally and project food-aid as employed by the World Food Programme. The effects of food aid used in combination with other types of development assistance — financial, technical and material—might also have been touched upon.

"Where data on food aid are given in current prices, they mask the considerable erosive effects of commodity and freight price rises on the real value of this type of assistance. Another shortcoming, recognised by the author, is that several important developments have taken place since the book entered into production which potentially can have a significant impact on food aid generally. Among them are approval by WFP's governing body, the Committee on Food Aid Policies and Programmes (CFA), of guidelines and criteria for all food aid, assessment by the CFA of food-aid requirements in the 1980s and the coming into force in 1980 of a new Food Aid Convention which establishes a higher guaranteed level of 7.6 million tonnes of food commodities.

"The author emphasises that the study concentrates on the donor side of the aid relationship. Another study is needed of food aid seen from the perspective of the recipient countries. This is particularly important. On the threshod of the 1980s, as the coalescing crises of food, energy and money supply begin to take effect, it is critical to determine how food aid can best be used to stimulate development, not dependence, in the developing countries."

BOOKS RECEIVED

Controls on International Capital Movements—Experience with Controls on International Portfolio Operations in Shares and Bonds, published by Director of Information, Organisation for Economic Co-operation and Development, 2, rue Andre-Pascal, 75775, Paris, CEDEX 16, France, pages 64, price not mentioned.

Peeping into the Personnel World by V. V. Raman—Illustrations Pankaj Goswami published by Young Man & Co. 888, Nai Sarak, New Delhi 110 006, pages 141, price Rs 12.50 (paper back), Rs 25.00 (Hard bound).

Realities in Management by C. Northcote Parkinson & M. K. Rustomji published by IBH Publishing Company, 412-413, Tulsiani Chambers, 212, Backbay Reclamation, Nariman Point, Bombay 400 021, pages 224, price Rs 22.50.

Industrial Relations System in the United States of America—Monograps No. 29, published by The Employers' Federation of India, Army & Navy Building, 148, Mahatma Gandhi Road, Bombay 400 023, pages 53, price not mentioned.

Micro-plan for Full Employment—A Case Study of a Block in Karnataka by Dr K. Puttaswamaiah & published by Oxford & IBH Publishing Co, 66, Janpath, New Delhi 110 001, pages 331, price Rs 100.

Public Enterprise Management—Constraints & Autonomy—June 1981 published by the Director, Dr Raj K. Nigam, Documentation Centre for Corporate & Business Policy Research, A-2/24, Azad Apartments, Sri Aurobindo Marg, Post Box No. 4557, New Delhi 110 016, pages 65, price Rs 35 (inclusive of postage).

Some Random Reflections on Current Economic Situation, foreward by Dr Jagannath Mishra, Chief Minister, Bihar, June 1981, published by Dr Raj K. Nigam, Director, Documentation Centre for Corporate & Business Policy Research, A-2/24, Azad Apartments, Sri Aurobindo Marg, Post Box No. 4557, New Delhi 110 016, pages 86, price Rs 36 (inclusive of postage).

Statistics of Road Traffic Accidents in Europe, 1979, vol xxvi, prepared by Economic Commission for Europe, obtaining book write to : United Nations, Sales Section, New York or Geneva, pages 106, price $ US 10.00.

Report of the Study Team on Agricultural Credit Institutions in Himachal Pradesh, published by Mr V. P. Malhotra, for the Reserve Bank of India, Agricultural Credit Department, Worli, Bombay 400 018, pages 420, price not mentioned.

BEL ENTERS LSI ERA IN ICs

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COMMERCE

Vol 143 No. 3663 Bombay, August 29, 1981

25 years of ONGC

– A FEATURE

ONGC's second offshore drilling rig Sagar Vikas.

(On main cover : A view of BHN platform)

Exploring for oil and gas

By **P. T. VENUGOPAL**

TWENTYFIVE years ago, the Oil and Natural Gas Commission comprising then of a part-time chairman. Mr K. D. Malaviya, and two full time members, Mr A. M. N. Ghosh and Mr A. C. Bose, met at Dehradun for the first meeting of the Commission. At that time, except for some exploration efforts in progress in West Bengal under an Indo-Stanvac project and a degree of exploration and exploitation for hydrocarbons in the north eastern corner of Assam by Assam Oil Company, the entire country was practically a virgin land so far as prospecting for hydrocarbons was concerned. The sedimentary basins on land cover an area of one million square kilometres, a vast expanse encompassing forests, marshes, deserts, mountains and plains.

Initially an aero-magnetic survey covering a part of Rajasthan and Punjab and the entire Ganga Valley was conducted. Then geological field parties were deployed for mapping of Punjab and present day Himachal foothills UP foothills, Rajasthan and Kutch. Seismic survey parties soon followed in Cambay basin, Rajasthan and Assam the work being handed by ONGC personnel, supplemented by an Indo-Soviet seismic party working in Punjab.

Data of the subsurface was acquired, interpreted and the first well was spudded in 1957 at Jawalamukhi. Gas was struck in this well in May 1958 but not in commercial quantities. The next wells were drilled at Cambay (Gujarat) and Disangmukh (Assam). At Cambay oil was struck in September 1958. Assam and Gujarat became the first two states to yield commercial hydrocarbons and even today all the on-land fields lie in these two states except for a small field in Nagaland which went into production in the last few months. ONGC's onshore fields currently give an output of five and a half million tonnes per year. There is an additional production of almost three million tonnes from Oil India fields in Assam.

Discovered reserves

In the last seven or eight years, the offshore has come into the forefront. The Bombay High field where oil was discovered in February 1974, in oil parlance is a 'giant' field. Today the field produces at the rate of eight million tonnes per year and this rate will go up as further development progresses. There have been many other discoveries in the offshore following Bombay High.

As on January 1, 1981, a study carried out by ONGC's Reserves Estimate Committee places the initial oil in place in ONGC's fields at 2,463 million tonnes and gas in place at 840 billion cubic metres. Of these the share of offshore is 1,772 million tonnes of oil and 740 billion cubic metres of gas. At this point, a word of caution is called for. It is only a small part of the oil in place that can be won for commercial production. A larger part of gas in place is, however, recoverable. It is estimated that the balance of recoverable oil, by primary recovery, is 328 million tonnes from offshore and 102 million tonnes from on-land. For gas, the figures are 329 billion cubic metres and 26 billion cubic metres respectively. At current international prices, the recoverable gas and oil as above has a value of 120,000 crores of rupees. The proportion of oil that can be recovered can be raised by secondary recovery techniques. Research and experimentation on these have been taken up. The exact technique to be applied will differ from field to field. It is to be added that oil or gas can only be produced from a field, gradually, spread over a number of years. Maximum efficiency rates for withdrawal should in no circumstances be exceeded

Mr P. T. Venugopal
Chairman,
Oil and Natural Gas Commission

It is thus extremely rewarding to search for oil and gas. There is much work to be done in this country before it can be said that all that can be discovered has been discovered. Accordingly the ONGC has been drawing a ten year perspective plan for exploration in the current decade. It shows that even in Gujarat and Assam, which are producing zones 216 and 490 exploratory wells respectively are required to be drilled. In the offshore, a minimum 200 exploratory wells have to be drilled. Then there are the numerous sedimentary basins on-land where drilling has so far not produced results, but the drilling density has not been adequate and so more drilling is required.

Results come faster from the offshore. Here in view of no land having to be acquired or right of way secured or no approach roads having to be built, all processes proceed speedily. Rigs for drilling are always in ready position to drill on drillships or barges which move with ease from location to location, whereas on land the rigs have to be moved in parts, assembled, dismantled and so on. Nevertheless, on land work has to be given as much importance as offshore work. Every litre of oil and every cubic metre of gas is valuable wherever it occurs.

Areawise strategy

In what follows an attempt is made to outline the exploration strategies being adopted in some of the areas of the country. The list, however, is not exhaustive.

Gujarat: So far, exploration has been confined to relatively shallow depths in the Cambay basin. The plan now is to take up deeper prospects also. The discovery of gas at Dahej at deeper levels has opened up a new vista. Incidentally, exploration will be taken into the older rocks of Mesozoic age. The northern part of Gujarat also holds promises.

Assam and other N. E. States: Exploratory drilling is being mostly carried out in Brahmaputra valley and Tripura and more will be done. Some drilling has also been carried out in Cachar, Meghalaya and Nagaland and more drilling is planned. It is also intended to go into new areas like Dhansri valley, Naga thrust zone and some of the folded anticlines of Tripura. Elsewhere, as in Mizoram and Arunachal Pradesh, geological mapping will be continued.

West Bengal: Several wells have been drilled in the past but there has been no discovery. Two wells are now under drilling. Wells in the past were located on 'structures' delineated by seismic surveys. A new approach now being pursued is to search for sand bodies in the extension of ancient deltas under the sea before its receded to its present shore line. In the Sunderbans area, seismic survey work using a shallow draft barge has recently been completed and the data are under processing.

Andhra Pradesh : Wells are under drilling at Narsapur-2 and Razole. Gas was met with in the well drilled at Narsapur. More wells are being taken up for drilling.

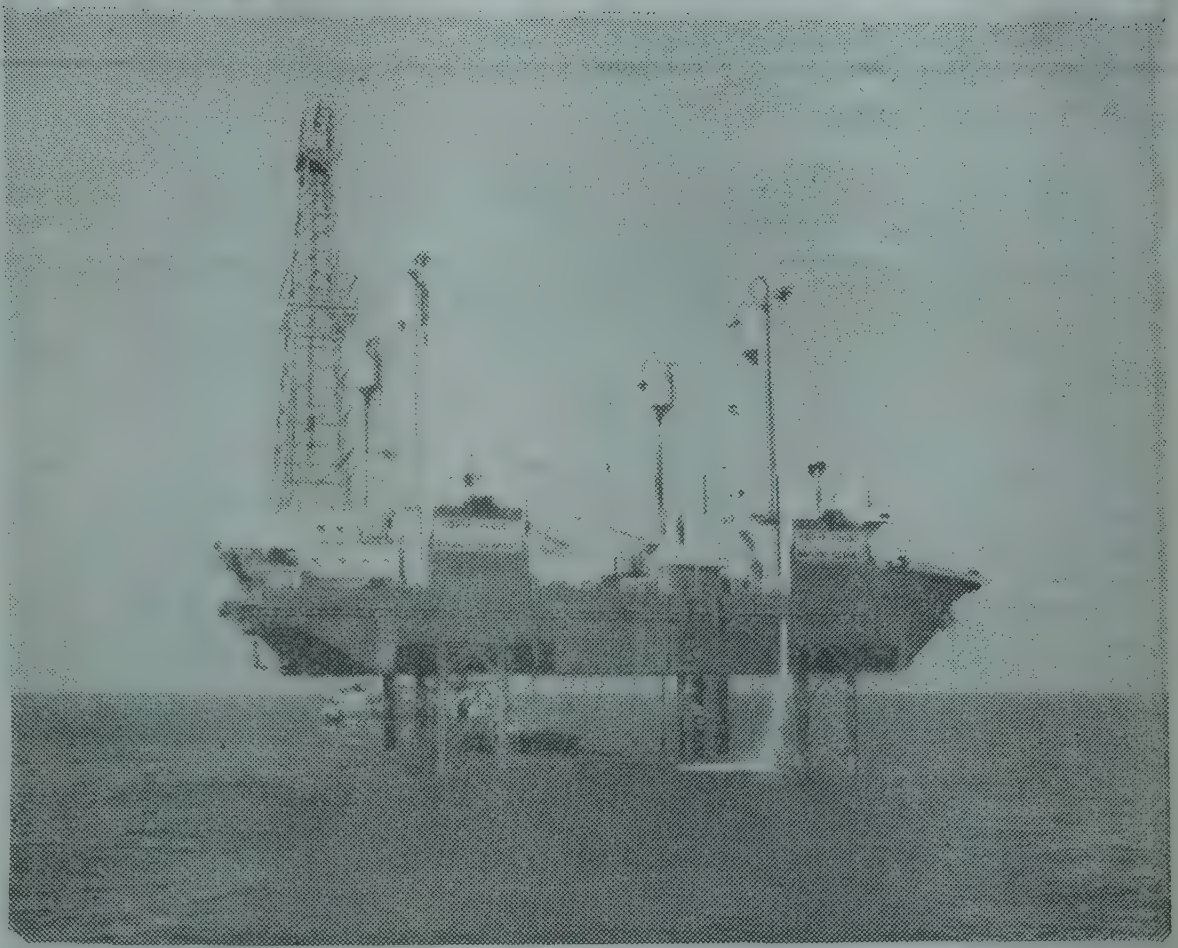
Tamil Nadu: Although several wells were drilled in the past, except for a show of oil and gas near Karaikkal and Madanam respectively, there was no worthwhile find. In the new strategy, search is being carried on by seismic parties for structures in older rocks of Mesozoic age. In due course it is the intention to resume drilling on interesting structures as are discovered.

Rajasthan: Here also, several wells have been drilled in the desert of Jaisalmer but except for a small gas find at shallow depths, the wells were dry. In the new strategy seismic parties will map structures at deeper levels including older rocks of Mesozoic age. Driling is to be resumed in due course.

North Western Himalayan foothill: This area falling in J & K, Himachal Pradesh and Uttar Pradesh has a complex geology. Simpler seismic methods of delineating structures at deep depths of 5,000 to 6,000 metres have not given precise results. Towards the later part of 1981, a special telemetric seismic survey, using a foreign contractor, will be taken up in an endeavour to locate new prospects for drilling.

Ganga Valley: This refers to the plains of UP and North Bihar. Wells drilled so far have been dry. However, some interesting geological leads have been found and these are being followed up by seismic surveys in the first instance.

Offshore: The importance of Bombay High is widely known. South Bassein gas field is another 'giant' with a vast reservoir of non-associate gas. There are a number of satellite fields which have been discovered on the west coast. On the east coast, oil or gas has been met with in three structures, in different geologic basins. The potentialities of these are under assessment. The pace of exploratory work is being stepped up by the acquisition of more mobile rigs, either to be owned or hired. The sedimentary area of the continental shelf is 400,000 square kilometres and it is here where most work has so far been done. An equal area lies within the continental slope (beyond the continental shelf). Work will be extended into this area, first by undertaking systematic seismic survey and then by drilling prospects as are thrown up.



Sagar Samrat, the first drilling rig of ONGC.

The new oil and gas finds to come are likely to be in more complex and subtle geological environments. This would call for newer approaches in exploration, use of highly sophisticated instruments and integration of data obtained by different techniques. Towards this end, ONGC has updated its seismic instruments, logging equipment, well testing gear, data processing paraphernalia and laboratory equipment. The scientific and technical personnel keep their knowledge up-to-date and acquire new skills. Three research institutes for petroleum exploration, drilling technology and reservoir studies provide due support to field work. In the offshore, a research division is being organised to take up studies on various problems and to find solutions. All the research units will draw fully on support resources available in the universities and allied research establishments.

An often asked question is whether and when this country will attain self-sufficiency in oil. Today indigenous oil meets a little over 45 per cent of the demand and this percentage will increase perhaps to 60 in three or four years. Beyond that it is difficult to hazard any guess. Secondary recovery techniques would add to the amount of recoverable oil as time goes by. New fields would be discovered and these too will help to add to the available hydrocarbon stock. But, it should be remembered that oil is a non-renewable source of energy. While it is there, it should be used with best advantage. We have an abundant availability of natural gas. This again is a commodity which should be used judiciously. These are considerations which are of national importance. ONGC's task is to find all the oil and gas that there is.

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For long, oil was myth in India...

The eternal flame at Jwalamukhi, the mysterious bubbles in a pond in Gujarat . . . for ages, oil and natural gas were only myth in India. But today, ONGC's efforts have turned this myth into a living legend, a striking reality!

ONGC completes 25 silver years of striking black gold. Eventful years in which it has not only boosted indigenous oil production, but has also brightened the prospects of finding more oil; brought in a new ray of hope. It has emerged as one of the few fully integrated oil companies in the world, engaged in all aspects of oil exploration, drilling and production—on-shore and off-shore. As a technologically self-sufficient company that possesses the expertise and experience to explore for oil in the most diverse geographical conditions. And, as a profitable public sector enterprise in India, dedicated to self-sufficiency in oil.

ONGC's performance to-date has been comparable with the best in the world. It has already produced over 82 million tonnes of crude oil and over 8245 million cu.m. of gas. During the next 5 years, it plans to produce over 63 million tonnes of crude oil from off-shore and over 27 million tonnes from on-shore. This will mean a further foreign exchange saving of over Rs. 16,000 crores at the current world market price.

ONGC also envisages a 7-fold increase in gas availability—from over 2.7 million cu.m. per day in 1981 to over 12.6 million cu.m. per day in 1985. As ONGC's LPG plant at Uran has been commissioned, there'll be a significant increase in the supply of cooking gas.

An even more significant aspect of ONGC's growth is the reservoir of talents it has built up. A dedicated team of over 28000 men including some of the country's top-most scientists, engineers, geologists and geophysicists. Men who have telescoped over a century of expertise in the field into this brief span of twenty five years.

Today, the silvery past is guiding ONGC to a golden future as it continues its all-out efforts to find more oil—living up to the faith the nation has in its ability.

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A silvery past—a golden future

1980-85: The years of promise

THE Oil & Natural Gas Commission, which acts as the standard bearer for exploration and exploitation of oil and gas reserves of India, was set up in 1956, and later converted into a statutory corporation.

It has a chequered history. Starting with a slim production of 0.04 million tonnes in 1961-62, it produced 8.93 million tonnes during 1980-81. In its short career, it made an important discovery in identifying Cambay basin, which besides the well known areas extends into the offshore, where it has been better known as Bombay High.

And Bombay High is another name for a success story - a story of a fast find to fruition.

The Bombay High and adjacent areas are slated to produce in the five years 1980-85. more than 63 million tonnes per annum of crude oil, 9,736 mmm^3 of gas in addition to 13 million tonnes of LPG.

Besides the increases in production from offshore areas, plans are afoot to improve it in onshore areas as well. Thus the overall production of crude oil at 8.93 million tonnes in the year 1980-81 is planned to be raised to 24.92 million tonnes in the year 1984-85.

The industry is capital intensive; development of an oil field even after its discovery is a time consuming process. The discovery itself comes after sustained efforts over a long period. And, therefore, the key phrase in ONGC is long range accelerated planning.

Search for oil begins with geological surveys, followed by geophysical surveys; then comes exploratory drilling. In case where we are lucky, development drilling follows. Luck has been very much with ONGC of late; for it follows those that have a vision and mission, those that strive hard to make dreams realities.

In the Sixth Plan period (1980-85) geological parties are being strengthened, provided with sophisticated equipment; and trained in more modern techniques. Besides, rechecking on earlier covered areas, new areas are getting increased attention. More important amongst them are shallow areas in the Gulf of Cambay, Sanchor, Barmer Basin, Dhansiri Valley, North Bank of Brahmaputra, Naga Hills, Sunderbans in onshore areas, and Krishna, Godavari and Andamans continental shelf, the R-12, B-37, B-38 structures, in offshore areas. For undertaking geophysical surveys in certain areas like Himalayan foothills, West Bengal and in Tripura foreign parties will be associated to expedite these surveys and transfer their latest technology, techniques and practices. Further, depending upon our need for early surveys in offshore areas, we intend to employ contractor vessels in addition to our own survey with '*Anweshak*'.

By V. RAMANUJACHARI
Member (Finance), ONGC.

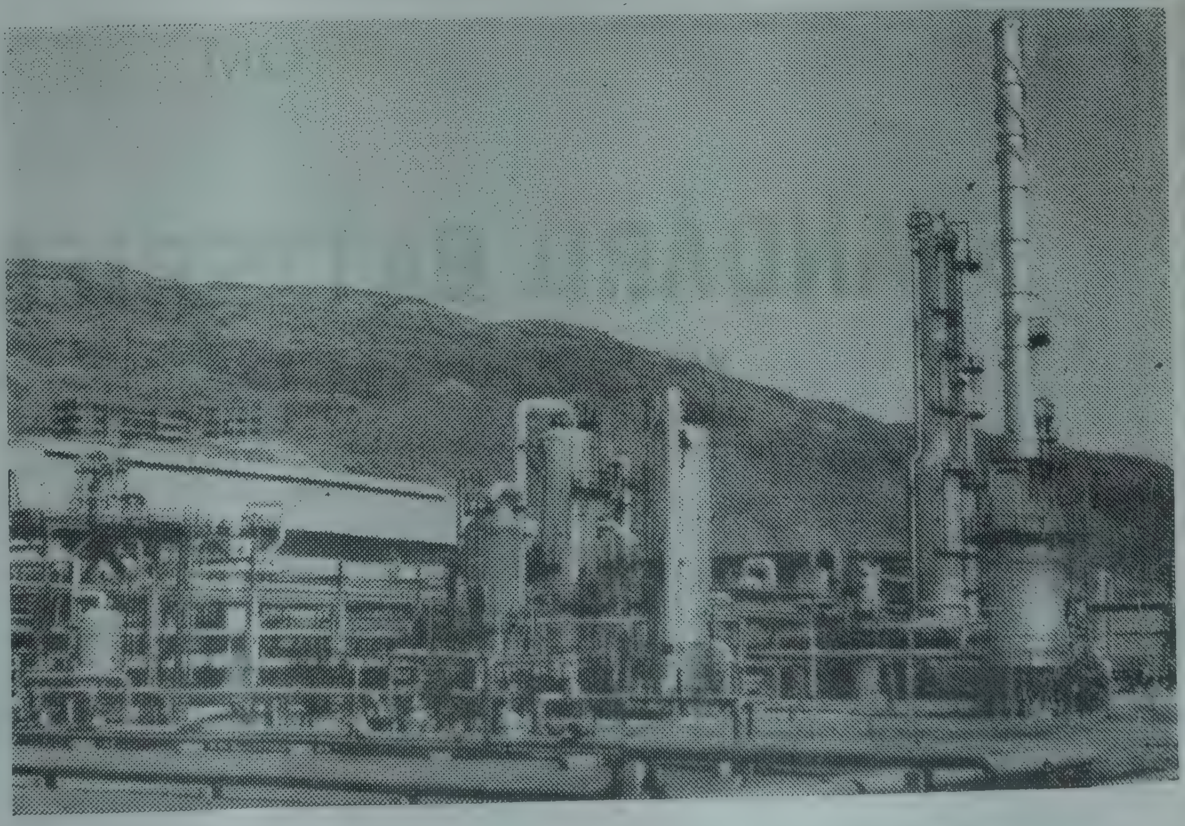
The data thrown up by these geophysical surveys requires most careful interpretation. Over these 25 years, ONGC has developed high skills in this field. Their scientists vie with the best. They are exposed to new practices/technology by encouraging association with international forums and organisations in this field. The Institute of Petroleum Exporation with its own prestigeous computer centre, is well staffed as also well equipped. So will be the other two Institutes of Drilling Technology and Reservoir Studies.

The drilling efforts planned during the five years period are of the order of 566 wells in the onshore and 323 wells in the offshore using 204 and 39.3 rig years respectively. The number of drilling rigs on onshore will increase from 33 in 1980-81 to 48 in 1984-85 and the number of rigs utilised will increase considerably in the offshore as well.

Exploratory drilling on onshore areas will be in Rajasthan, Cambay Basin, N.W. Himalayas, eastern part of the country, and in areas around Ganga delta, Krishna-Godavari delta and Cauvery basin areas. In the offshore, the major thrust will be the western continental shelf, the Bassein B-38 trend, the Ratnagiri shelf and on the east coast, the basins of Krishna-Godavari, Cauvery, the Andaman offshore. This sort of thrust begets oil.

These exploratory efforts are expected to lead to a discovery of about 700 million tonnes of in-place geological hydrocarbons (oil and oil equivalent of gas) or 165 million tonnes of recoverable reserves of hydrocarbon.

The crude oil production will very nearly treble in 1984-85 as compared with 1980-81. These additional quantities do not drop like manna from heaven; they surge from deep within; from new fields or by enhancing recovery from existing ones. For the latter, reservoir behaviour needs to be studied carefully, suitable techniques used to make the fields better. It is here that the role of the Institute for Reservoir Studies becomes very significant.



The LPG (liquified petroleum gas) plant at Uran, near Bombay.

Production of crude oil is of primary significance but there is rightly an enhanced emphasis on the production of gas. Its use as feed stock for fertilisers, as base for many chemical industries, besides its earlier common place use as fuel has been adding steadily to its reputation as an up and coming money spinner and a valuable industrial input The sources of gas production are two-fold-associated which comes up alongwith crude oil and is separated later, and free which comes from gas fields unmixed with crude oil. During 1980-85 period output will be raised from 1,018 mmm^3 in 1980 to 4,423 mmm^3 in 1985. Also based on offshore gas, a liquified petroleum gas plant which will produce 1,70,000 tonnes, has come up in Uran. Turn towards Uran; that is where the light is.

This build up of capabilities to meet these soaring targets will need not only the utmost human effort, the best of managerial talent. It also needs the most meticulous planning. The prospective fields are unique like human being; no set pattern repeat itself; situations are widely divergent making challenges complex and different. Technological advances in this industry are coming even faster than in most; obsolescence is therefore high. The depleting nature of each field compels that before one runs out, another should be found to replace it to maintain production at a given level. But to keep running to stay where one is, spells medicority; one has to set up a faster pace.

Bombay offshore is where the fast action is. And no wonder. From 4.75 million tonnes in 1980-81, production will make a speculative leap to over 19 million in 1984-85. LPG production will increase from almost scratch to 2,08,000 tonnes; and gas from 293 mmm^3 to 2,914 mmm^3 in 1984-85.

Apart from the revenue expenditure to raise above indicated quantities of crude oil, gas and LPG, an investment of Rs 4,787 crores will be required during the five years 1980-85. Of this amount, the internal resources of the company will provide Rs 4,537 crores, thus leaving a very marginal requirement of Rs 250 crores to be found from external sources.

This very substantial internal generation of money resources in the period 1980-85 is after paying huge chunks of money to both the Central Government and state governments as royalty and taxes. The payments to the Government of India during 1980-85 by way of royalty and cess will be Rs 1,420 crores as tax on our income of Rs 3,500 crores and a dividend Rs 101 crores. Also during these five years payments to various governments by way of royalty on gas and sales-tax would aggregate to Rs 270 crores.

All this means a giant leap forward.

The sights are set on the stars, even as one soars towards these high targets, one cannot lose sight of the human resources that makes these expectations attainable—and worthwhile. Establishing goal congruence, development of each individual, improving the educational facilities for stretching the horizons of knowledge, provision of medical facilities, easing problems of accommodation; enabling employees to infuse a richer content to the quality of life, raising significantly their contribution to the social fabric, helping them in their pursuit of perfection is getting increasing attention.

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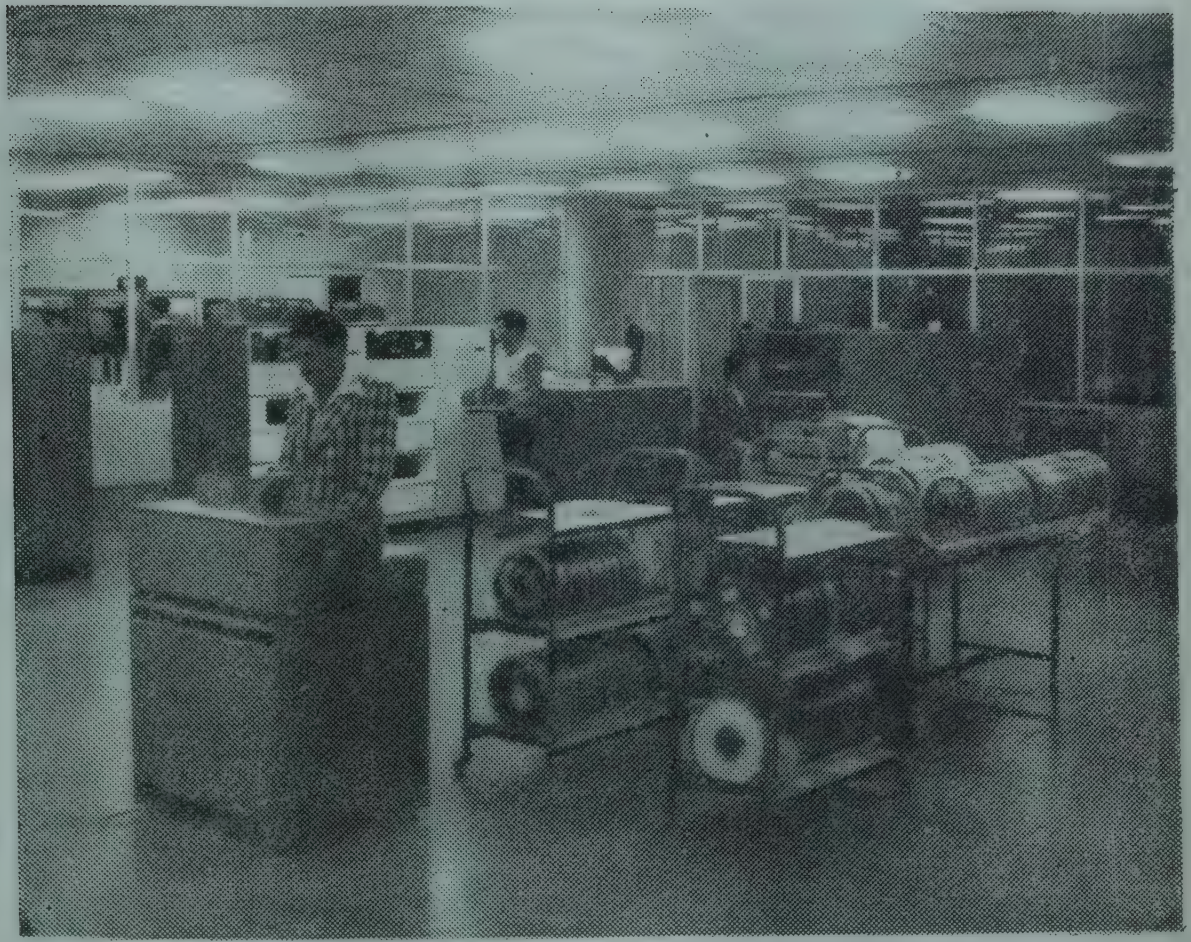
Opportunities for import substitution

By **P. N. JHA**
Member (Materials), ONGC.



Computer centre at Dehra Dun.

THE Oil & Natural Gas Commission is engaged in the work of exploration, drilling and production of crude oil and natural gas in India and abroad. ONGC requires specialised and sophisticated equipment and material for its operations in onshore and offshore areas. The quantum of imports of materials and services amounting to Rs 910 crores during the year 1980-81 gives clear idea about the vast opportunities that exist for indigenous industry. They can play a vital role by taking up import substitution work falling within the sphere of their expertise and thus provide the much needed support to the efforts of development of oil resources in the country.

The ONGC has all along been aware of the serious implications of dependence on foreign sources for the supply of equipment/spare parts and sub assemblies in a critical industry like oil. Accordingly in the year 1962 it set up a 'Design & Manufacturing Unit' within the then Directorate of Mechanical Engineering, mainly for developing spare parts and consumables of mechanical engineering nature. This unit was subsequently renamed as Import Substitution Group which is now a part of Materials Management Organisation of ONGC and has expanded its activities to cover indigenisation of complete equipment and assemblies required for onshore and offshore activities of the Commission.

Since the oil industry is comparatively new to our country, indigenous manufacturers are not quite aware of the application and technicalities involved in the manufacture of various equipment, materials and services required. The exhibitions on import substitution set up at Dehra Dun, Calcutta and Baroda display and highlight some of these and serve to create the required awareness amongst the visiting entrepreneurs. Representative samples of various consumables requiring indigenous development are placed in these exhibitions to give an idea of the wide range of items required. The data about the commercial potential are also depicted side by side. In case of bigger items, the indigenous replacements have to fit in the available space and match performance levels of imported equipment, which have been depicted in the forms of graphs, charts and photographs.

The import substitution programme of the ONGC offers new opportunities to Indian manufacturers to participate in the indigenous development of various types of equipment, spares and subassemblies. The manufacturers are registered under the import substitution programme after the capacity and capability of manufacturers for our indigenous development programme under a particular category of items has been verified. Tender enquiries are sent only to those manufacturers who are registered for the particular category of jobs and as such the competition is limited and that too with genuine parties. Development tenders are invited for consumables which may be backed by commercial batch orders. Manufacturers have option to absorb the development cost in samples and/or economical batch supplies or carry forward the same for gradual recovery from future supplies

The manufacturers who are in a position to develop an item for the first time, can be given long term rate contracts to meet the requirements of all projects of the ONGC. The Import Substitution Group provides technical guidance to the intending manufacturers at different stages by providing write-ups, drawings, specifications, test codes and also arranges for stage inspection wherever necessary, so as to reduce the possibility of rejection of the product at final stages. A feed back on the performance of the product is provided to the manufacturers to help them to incorporate improvements so as to bring the product to the desired standard.

Manufacturers are thus given an opportunity to develop their expertise in association with the Commission, in the hitherto almost unknown field of manufacture of equipment, spares and assemblies for oil exploration and production industry. As a matter of fact, some of the manufacturers who started by developing certain items under import substitution programme of ONGC have already bagged export orders. Import substitution programme may, therefore, be looked upon as a gate-

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way to the vast international market for oil field equipment and spares.

Due to sustained efforts and cooperation of indigenous industries, the ONGC has been able to effort cumulative savings of foreign exchange to the tune of Rs 127 crores by developing over 1400 items till March, 1981. These efforts have also been recognised at the national level and the ONGC has so far won eight National awards for import substitution activities and new inventions.

The major items already developed in the country so far include deep drilling electrical rigs, rig power packs, reciprocating slush pumps, mud tankage system, work-over rigs, high pressure valves, flow control equipment, geoscience equipment, spares and accessories used in oil well exploration and production and a host of other items too numerous to mention. Development of X-mas trees and well heads is also in an advanced stage. Our own workshops at Baroda and Sibsagar have made valuable contributions to import substitution efforts by developing heater treater, oil and gas separator, bottom hole winch, mud degasser, Worko-50 and Worko-28 rigs, shot hole rig, hydraulic wire line winch etc etc.

Various types of industries have got good scope to take-up development work. For example, the manufacturers of high horse-power diesel engines and multistage torque converters can make an endeavour to meet our requirement of power packs in the range of 800 to 1200 hp. These power packs are required for providing motive power to the drilling rigs. Industries engaged in the manufacture of load handling equipment can undertake development work of rig tackle systems which consists of multi-sheave crown block, travelling block and hook. Valve manufacturers can examine development of X-mas trees, well heads and high pressure valves with matching flanges. For those manufacturers engaged in the manufacture of industrial roller transmission chains, we have to offered development work pertaining to chains up to ten strands in accordance with various iternational standards. While rock roller bits are being manufactured in the country, scope for undertaking development work of carbide version of bits is still open. There are a number of smaller accessories like relays, two way, three way and four way control valves, quick release valves and air swivel etc which can be manufactured by pneumatic control industries.

Pipelines getting ready to be laid in the sea.

General engineering industries and pressure vessel manufacturers can undertake development/manufacture of items like floating equipment, swivel joint, quick union, slush pump, metallic consumables, sucker rod pumps, sucker rods, ponny rods etc etc. While separaters, heater treaters and storage tanks are already being manufactured in the country, additional manufacturers are welcome. Those entrepreneurs engaged in the electronic industry can take up tape transport for use with digital seismic system, hydrophone, galvenometer, CDP seismic cable, inclinometer etc etc.

We use a very large quantity of seamless pipes as casings, tubings and drill pipes. The requirement of casings up to 5½" diameter is being partly met by an indigenous manufacturer while the scope for undertaking development and manufacture of casings, drill pipes and tubings of larger diameters is wholly open to the industry. The total offtake in respect of casings larger than 5½" size is over 25000 tonnes/annum valued at about Rs 30 crores. In the category of consumable items, rubberised moulded parts form the core. As a matter of fact whatever rubberised items for meeting ONGC needs, have so far been manufactured by indigenous industries, are far below the international standards. The reason for this may be that these parts have to work under very difficult conditions where these are required to counteract effects of abbrasive materials and chemicals. This is virtually a challenge to the rubber industry to come up and develop components which can give performance equivalent to imported components.

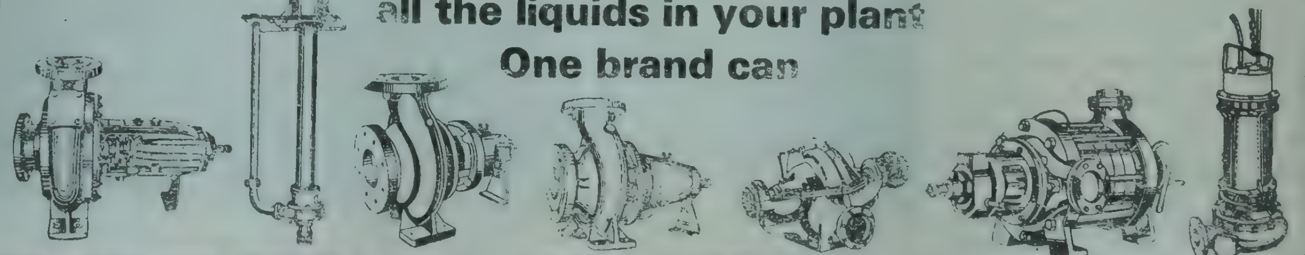
Though indigenous capability has bees developed and its capacity is being progressively increased, scope exists for additional manufacturers who have shore based fabrication facilities. Such platforms comprise 3000 to 6000 tonnes of steel fabrication. In addition some of these will require equipment for installation on various decks. The various deck modules involve development of air conditioning systems, compressors, pumps, residential and power generation systems etc. Such equipment can be developed and manufactured at various locations in the country and thereafter be assembled on the main decks at the fabrication yards, which in view of logistic problems, have necessarily to be located on the seashore.

The Commission's requirement of mud and oil chemicals is substantial. The annual offtake is of the order of Rs 10 crores. The range is wide starting from mud detergent to pour point depressant. Annual requirement of some of these may be as high 2000 tonne. Most of these chemicals are marketed by brand names only and are not amenable to quick indigenisation. A concerted effort has been made to analyse and idenify the constituents of such chemicals so that substitute formulations could be developed and tried extensively before adoption for regular use.

In their offshore operations, the Commission uses varieties of ocean going vessels such as supply vessels, exploration vessels, multi purpose support vessels, drilling rigs, drill barge, drill ships and dynamically positioned drill ship. Some of these vessels are owned and other leased on charter hire basis. The Commission has recently taken a decision to have its own fleet of offshore supply vessels and would be procuring about 20 of these mostly from the indigenous yards. Even for sophisticated vessel like multipurpose support vessel or drill ship provision is invariably made at the time of purchase for transfer of technology to an indigenous yard so that subsequent requirement could be met from within the country.

Yet another area of high priority for indigenisation is that of services. Presently the Commission is engaging foreign contractors for highly sophisticated drilling, cementing, diving, and stimulation services as also operating and management services for various types of vessels mentioned in the preceding para. Beginning has already been made to progressively indigenise these services. Even the present helicopter fleet owned and operated by foreign contractors would be replaced by Commission-owned helicopters operated by IAF crew in the near future.

As would be seen from the above, the list of imported items is long. Not all of these are amenable to indigenisation though. In the oil industry the stakes are high. Failure of a material costing only a few rupees can easily result in a loss of few crores. The need for strict conformity to specifications and extensive trial can hardly be overemphasised. Some items have very high technological content but low offtake. In some cases, the cost of setting up the manufacturing facility is too high and required production too small for making such unit economically viable. It may be futile to attempt indigenisation in such areas even with an eye on export market. Not deterred by these considerations, the drive for indigenisation continues incessantly in the Commission. For, even though stakes are high reward is even more satisfying.



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Offshore hydrocarbons: Challenge and opportunity

By **A. K. MALHOTRA,** *Member, Offshore, ONGC.*

THE eighties may well mark a new turning point in the continuing saga of offshore hydrocarbons exploration and development. The dependence of India on imported crude, and the prospect of even greater dependence on uncertain and insecure sources of foreign supply — lends a special emphasis to our plans to explore for and develop oil and gas. I shall focus my remarks on the supply side of the picture and lead to conclusions which, briefly stated are :

(i) "There are ample resources of petroleum in the world, still undiscovered, which should permit an orderly transition from our present petroleum dependant civilisation to a society based on alternative energy sources during the next 30-50 years". The problem today is of price, not availability.

(ii) That much of this oil/gas would be in smaller pools and/or harsher environments but would become recoverable with advances in technology.

(iii) That these resources can be economically exploited given the requisite capital, technology and management.

(iv) That the effort being made today needs to be accelerated and that the special problems that India and Indian industry face today present both a formidable challenge and a magnificent opportunity.

Exploring for oil

Despite popular views to the contrary, oil industry sources continue to assert that there is plenty of oil and gas yet waiting to be discovered — atleast enough such that there can be an orderly transition to a non-oil based economy in the next two decades. Many other estimates all point to the fact that 'as much oil is yet to be found as has already been found'. At the 10th World Energy Conference, a Delphic poll of the delegates also forecast that 45 per cent of the ultimate world oil and gas reserves would come from offshore.

Various experts have estimated the ultimate recoverable reserves of crude oil from shale, heavy oil deposits and tar sands at 3.4 trillion bbls — broken up as :

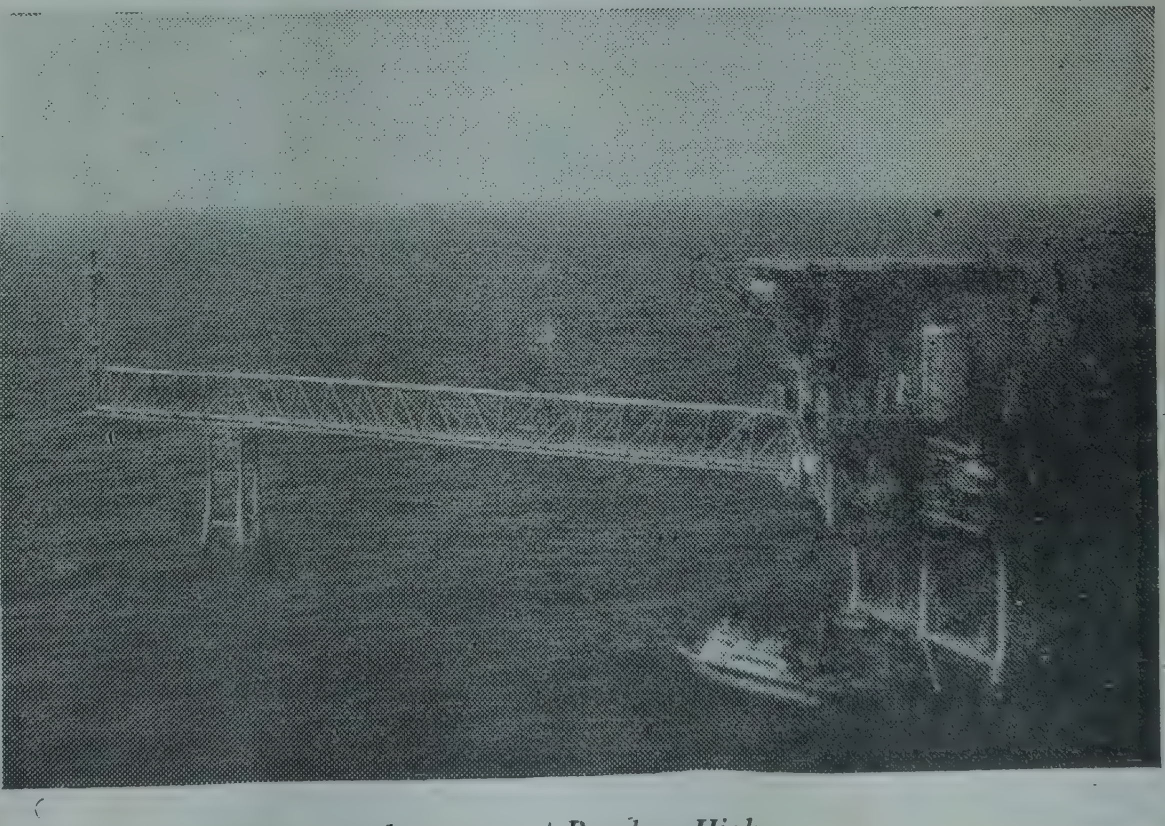
	Trillion
Already produced	0.4
Already discovered	0.6
New discoveries	0.75
Enhanced recovery technology ..	0.65
Shale oil recovery	0.20
Heavy oil and tar deposits	0.80
Total	3.40

P. J. Wood estimates 1.038 trillion bbls of oil has already been discovered and another 1.125 trillion bbls can be potentially discovered. Thus it may be prognosticated that as much as 500 billion barrels of oil are likely to be found offshore.

As we have learned more about origin and distribution of petroleum, our estimates have increased — from a low forecast of 400 billion bbls in 1943 to a high of nearly 4 trillion bbls in 1978 — a 10-fold increase in 3/5 years. Thus even the estimates made today may turn out to be underestimates a decade later. Besides, the economic oil base used for these estimates is dependent on costs, which in turn, depend on the developments of technology. While there may have been more "petroleum originally in place" in smaller reservoirs proportionately more may have been uneconomical to produce in the past. But major technological advances and improved petroleum prices can convert the smaller, deeper or more remote reservoirs to profitable ones, thus increasing further the estimates of the economic oil base.

In the oil industry, reservoir size distribution seems to follow a low-normal pattern — there is a relatively small number of giant reservoirs and a relatively large number of small ones. Data show that the sum of oil in the small reservoirs is, however, far larger than that contained in the giants. In the US, only 36 per cent of known oil finds are found in the giant reservoirs (*i.e.* greater than 500 million bbls) while in the world as a whole, 75 per cent is in giant accumulations. According to Wood "technology and economic incentives advance sufficiently, the world as a whole should attain a drilling maturity approaching that of the US". The clear implication is that there are a large number of small reservoirs still to be discovered outside the US — and which are likely to be found if exploration work is intensified to a degree approximating the US today.

Another approach to the problem of oil exploration lies in the geology of the earth. Oil/gas are formed and trapped in sedimentary basins and a very generalised three-fold classification based on the "concept of crustal plates that move over a long periods of time and change their positions relative to one another" has been developed. The oil-bearing basins



'SA' process platform in southern part of Bombay High

are identified to lie in three kinds of basins :

Convergent — basins on margins of plates moving towards one another.

Divergent—basins on margins of plates moving away from one another.

Interior continental plate — basins remote from the continental margins at the time of basins formation.

The distribution of known oil accumulations in the world today is :

Convergent — 9 per cent of known oil/gas in the world.

Divergent — 23 per cent of known oil/gas in the world.

Plate interior — 68 per cent of known oil/gas in the world.

Also giant oil fields contain more than 75 per cent of world's known reserves. The distribution of giant oil fields is convergent 11 per cent, divergent 27 per cent and interior 62 per cent. The point to note is that this distribution may very well be a function of degree of exploration that each basin type has undergone. The interior basins are, for example, readily accessible while the others are not.

The majority of the world's prospective area is non-productive todate. Present studies indicate that as many as 145-155 major basins and sub-basins are virtually undrilled at this time. The offshore sedimentary basins cover 50 million sq km (as compared to 65 onshore). The continental shelf has 15 million sq km whereas the continental slope (200-300 m water depth) covers at least 25 million sq km.

Based on an analysis of the above factors, it has been estimated that the prospects for growth of offshore oil production in the years to come are as given in Table 1.

At present, proven reserves of offshore petroleum total 155 billion bbls or 23 per cent of world's proven reserves. For natural gas, figure is 17 per cent. It is prognosticated in the industry that the reserves to be discovered are at least 5 times those already discovered.

Indian assessment

The total land area occupied by the sedimentary basins in India is about 1.4 million sq km or about 42 per cent of the total land area. Sedimentary basins offshore have an area of 380,000 sq km up to a water depth of 200 metres. The ratio of onshore and offshore sedimentary basin to the land area is considerably less in India as compared to the world as a whole *i.e.* 42 per cent versus 75 per cent on land and 10 per cent v/s. 33 per cent offshore.

Of the total geological oil reserves from the various sedimentary basins in India, 67 per cent are estimated to be offshore. The total recoverable reserves onshore are about 40 per cent, while offshore oil is estimated at 60 per cent. For gas, recoverable reserves lie mainly offshore, constituting about 93 per cent of the total recoverable reserves of gas.

According to present projections, the offshore areas of India will provide a peak recovery rate of about 300,000 BOPD and a total gas of about 21-23 MMCMD. It should, however, be noted that these Indian projections are based on existing proven reserves. They do not take into account any additional discoveries in new fields. And finding new oil fields is a function of the effort expended to find new sources of petroleum.

Table I : Oil prospects (mbopd)

Region	1960	1968	1973	1978	1990	Growth rate 1978-90 (Percent)
N. America	0.28	1.30	1.60	1.10	2.0	5.1
L. America	1.60	2.55	2.70	1.68	4.40	8.3
Africa	0	0.30	0.90	1.40	2.00	3.1
Middle East	0.18	1.30	3.70	3.80	6.50	4.4
Asia/Pacific	0	0.08	0.80	1.45	3.00	6.2
W. Europe	0.01	0.02	0.05	1.45	3.60	7.9
Total Non-Socialist	2.07	5.55	9.75	10.88	2.50	5.8
Total Socialist	0.13	0.25	0.25	2.22	2.00	18.0
World offshore production	2.20	5.80	10.0	11.10	23.5	6.4

Table 2 : Wild cats to be drilled

Oil		Gas	No. of wild cats
Class A field	50 million bbls	300 billion/coft	422
B ,,	22-50 ,, ,,	150-300 ,, ,,	219
C ,,	10-25 ,, ,,	60-150 ,, ,,	84
D ,,	1-10 ,, ,,	6 60 ,, ,,	27

Industry facts on exploration

Statistics on exploration drilling versus prospective areas are not readily available. As can be seen from the table below, the US which is the most densely explored area in the world, has an exploration drilling density of 1 well in every 15 sq kilometres of prospective area. The comparative figures in India would be (for ONGC) of the order of 1 well in every 750-1,000 sq km. Offshore, the averages are 75 wells for an area of 380,000 sq km *i.e.* 1 well in every 4,500 sq km. While more drilling figures by themselves do not necessarily indicate the presence of hydrocarbons, clearly the effort made by us has been much smaller as compared to the US.

Exploring drilling

Density—onshore and offshore

U.S.	1/15	sq. km.
Europe	1/500	sq. km.
S.E. Asia Latin America Africa	1/1000	sq. km.
Middle East	1/2000	sq. km.

Uptill now only 200 exploratory wells have been drilled in water depths greater than 200 metres *i.e.* the drilling density is 1/175,000 sq km.

According to industry statistics (1943-52 data), to find ultimate recoverable reserves, the number of wild cats which had to be drilled are as in Table 2.

In the North Sea, over 51 dry holes were drilled before oil was found. Thus there is inherent risk in oil exploration and it is important to remember that even new advances in technology have not eliminated that risk.

A third factor of note is the increased activity in offshore oil industry in recent years. The offshore industry in 1979 drilled a total of 2,852 offshore wells — of which 1,240 were in the US. It is expected that the number of offshore wells will increase to 4,420 by 1985, thus placing great demands on equipment and materials. A typical exploratory well in the North Sea today costs about $ 8-10 million, while the corresponding figures for development wells in the North Sea and the Gulf of Mexico are $ 1.5 million and $ 3.1 million respectively. The number of drilling rigs in 1979 were 441-28 submersibles, 212 jack-ups, 119 semi-submersibles and 82 drillships/drill-barges. The cost of these units varied from $ 28-37 million for a deepwater jack-up, $ 75 million for a semi-submersible and $ 79 million for a dynamically controlled drillship today, but these costs are going up rapidly. Thus, the facts are that not only will exploration equipment be in short supply in the future, but that it will also be extremely costly even when available. This increase in offshore activity around the world has been caused by the following factors :—

- There is a shortage of oil in the international market place and this will probably persist throughout this decade.
- The soaring price of oil is opening up new offshore areas.
- Geologists estimate that 40-45 per cent of undiscovered oil and gas producible reserves will probably be found on continental shelves and margins — in areas which have yet to be explored.
- LDC's are keenly interested in initiating explorations of their offshore areas.
- Improving political climate is permitting companies to make major investments on new technology and equipment.
- Improved geophysical technology is making offshore oil/gas easier to find.

This increase in demand will skyrocket the demand for rigs, equipment, technology, services and capital. The implications of this sudden upturn in the offshore industry is bound to have profound implication on the Indian offshore effort.

Indian offshore export

The first step in offshore exploration in India was taken by the Oil and Natural Gas Commission (ONGC) in 1962 when an experimental seismic survey was undertaken in the Gulf of Cambay by its own seismic party, resulting in the discovery of the first offshore structure. Aliabet at the mouth of Narmada River. Another offshore structure, Tapti was detailed 25 km east south-east of Hazira. Soon after in 1964-67 regional reconnaissance (with locally semi-detailed) surveys were undertaken by a Russian seismic ship "Akademic Arkhangeliskey" for the ONGC in the Gulf of Kutch, parts of the Gulf of Cambay and the Arabian Sea, areas off the coast of Kerala, Gulf of Manaar, Palk Strait, Coramandal coast and the Bay of Bengal. A number of structures, including the present Bombay High structure, were delineated in the Cambay Basin and indications of anticlinal reversals were obtained in West Bengal, Godavari, Cauvery and Kutch Offshore.

In the early seventies, ONGC was entrusted with the responsibility of exploration and development of the Bombay High region. Consequently, the ONGC carried out detailed seismic surveys of Bombay High and some of its adjoining structures. Since the hydro-meteorological conditions and sea-bed conditions in the Bombay High region are difficult and warranted serious study for the selection of drilling rigs and equipment to be deployed before commencing drilling, the ONGC after obtaining expert opinion in this respect placed order in Japan for fabrication of a jack up type drilling rig in February 1971. The drilling rig *Sagar Samrat* arrived in Bombay in 1973. *Sagar Samrat* commenced drilling operations in Bombay High on January 31, 1974. Three weeks later, on February 19, 1974, oil was discovered in a limestone reservoir.

The offshore effort was further reinforced by purchase of a seismic survey vessel *Anweshak* in July 1975.

The Indian continental shelf *i.e.* up to water depths not exceeding 200 metres, covers an area of 380,000 sq km.

Offshore geophysical surveys in Indian waters are being conducted by the ONGC since 1963 for petroleum exploration. So far about 1,56,000 km of geophysical data have been acquired in different offshore basins of India. Reconnaissance survey has been completed in the continental shelf (up to 200 metres water depth) except in two areas, off Kakinada-Puri and Ongole-Madras where only regional survey has been done. A beginning has also been made to extend the geophysical survey into deeper waters (water depth greater than 200 m) over the continental slope and beyond. This includes survey along several regional lines in the western continental margin and reconnaissance survey in parts of continental slope in Bombay offshore region and Godavari-Krishna offshore.

The next stage in oil exploration-drilling wells has also kept pace with the geological and geophysical work. Till March 1981, ONGC had drilled 91 offshore exploratory and assessment wells. These have led to discoveries in Bombay High field and also further discoveries of oil in commercial quantities in the structures North Bassein, Bombay High fault-closure, B-38, R-12, R-9 and R-7 and significant oil shows in three structures *viz* D-1, B-22 and B-37. Further, two gas bearing structures *viz* South Bassein and South Tapti have also been discovered. Outside the Bombay offshore region, the ONGC has discovered oil in Godavari basin and gas in Andaman offshore. Indications of gas were also available in structures near Porto Novo in Pondicherry offshore. Apart from these discoveries, one exploratory well in Kerala offshore. one exploratory well at Kasargod offshore, two exploratory wells in Palk Bay have also been drilled. In summary, the ONGC in the offshore effort so far has drilled 91 exploratory wells. Of these only 35 have proven to be dry, thus giving ONGC a "success ratio" of 1:1:6.

Besides the ONGC, foreign agencies, M/s Reading and Bates have drilled one exploratory well in offshore Kutch, M/s Carlesberg Natomas two exploratory wells in Bengal offshore and M/s Asamera one well in Gulf of Manaar in Tamil Nadu offshore.

As a result of these efforts, recoverable reserves of the order of 240-250 million tonnes of oil and 270 billion cubic metres of associated and free gas have been established up to January, 1980. At present day prices, these amount to a saving in foreign exchange of Rs 50,000 crores in crude oil alone.

Soon after completion of the fourth assessment well in Bombay High in April 1975, plans were drawn up for putting the Bombay High field early on to commercial production. The first phase of the development programme envisaged establishing facilities for producing oil up to 40,000 barrels per day. This consisted of installing one well-cum-production platform called 'A' platform. three well-head platform called B, C and D platforms, one flare platform (for flaring the associated gas), one SBM. (Single Buoy Mooring System) for mooring tankers and loading oil into the same and all these installations inter connected by pipelines laid on the sea bed. Each well platform was provided for drilling four wells and the production platform is equipped with facilities to process 40,000 barrels of production from the wells by separating oil from gas and water. The Phase I installation work began in December 1975 and the first barrel of oil from the wells drilled at 'A' platform was pumped into the tanker *Jawaharlal Nehru*, moored to the SBM system, on May 21, 1976. This was accomplished in just two years from the initial discovery of oil in February 1974. The discovery to commercial production time of 24 months was one of the fastest effort in the offshore industry.

The target of 40,000 barrels of oil production per day equivalent to the annual rate of two million tonnes was achieved in January 1977 after drilling additional production wells.

Endouraged by the results achieved, the Phase II deveolpment programme of Bombay High field was taken up in early 1976, for establishing production facilities for an additional 40,000 barrels of oil per day. The installation of one well-head platform ('E' platform) and converting 'C' platform into a well-cum-production platform and installation of a second S.B.M. system were completed by April, 1977. In all 20 production wells were drilled in Bombay High and the production rate of 80,000 barrels of oil per day corresponding to four million tonnes per annum was achieved by January, 1978.

In this system of development, oil produced from the field was loaded into the tanker moored to the SBM and transported to shore by a shuttle tanker. The associated gas produced with oil was flared until a pipeline would be laid to carry the gas ashore. The tanker operations for loading oil through the SBM system also had problems of continuous operations as the weather conditions during the monsoon months (June to September) did not permit keeping the tanker moored to the SBM system, thus necessitating stoppages of production during these months.

In order to continue year round production, handle further expansion of production from the field, maintain uninterrupted flow of oil to the refineries and utilise the associated gas onshore, the ONGC planned to lay separate oil and gas submarine trunk pipelines from Bombay High field to Bombay shore and further on to Trombay where refineries, fertiliser and power plants are situated. The laying of 30" oil line and 26" gas line to shore at Uran and further lines to Trombay were completed by July, 1978 and oil and gas immediately started flowing to the consumers at Trombay. For the pre-treatment to gas and pumping of crude that is required prior to their being transported through the pipeline, the platform 'F' was installed by May, 1978 at the offshore end of the pipelines at Bombay High fields.

With the completion of these facilities the rate of production went up to 100,000 barrels of oil per day corresponding to five million tonnes per annum in December, 1978.

The next phase of the programme envisaged the step up of production of crude oil from Bombay High to 140,000 barrels per day corresponding to seven million tonnes per annum by installing a giant process platform, BHN and more well platforms. The BHN platform was commissioned in May 1981.

Besides this, a four million cubic metre per day capacity gas fractionation with LPG extraction facilities of 198,000 tonnes per annum, has been installed at Uran. Similarly, a crude stabilisation plant with storage tanks for storing stabilised crude has also come up at Uran.

The Phase IV of the programme is presently under implementation. In the programme, it is planned to step up the production of crude oil from Bombay High from 140,000 to 240,000 barrels per day corresponding to 12 million tonnes per annum by middle of 1982. During this phase of development Bombay High South (BHS) process platform, similar in design and capacity to BHN, will be installed in the Central/South part of Bombay High, adjacent to SA platforms. Moreover, another 10 well platforms will be added to the field to step up production to 240,000 BPD.

Work has also started on installation of telemetry and telecommunication facilities between the various platforms in the field and between the offshore field and the shore terminal at Uran *via* satellite link. Under this system, telemetry and telecontrol facilities are to be provided for BHN and associated well platforms and also for the platforms in Bombay High central/south region. The telemetry of the Uran terminal as well as for the associated pipelines to Trombay and consumer points will be provided. For the sub-sea trunk pipelines, there will be a control and communication satellite earth station located at Bombay High North with a corresponding control earth station (shore) at Uran.

Similarly, work has started for developing ONGC's supply base and wharf at Nhava for supply vessels to dock, for drilling rigs and other ancillary equipment to be repaired and for storage of materials and supplies for offshore.

The investments in the development of our offshore fields have been as follows :

Phase 1 & 2	Rs 150 crores
3	Rs 554 crores
4	Rs 365 crores
5	Rs 214 crores
(advance action)	

In addition to these, government has under consideration plans for the development of South Bassein gas field and the Ratnagiri oil field.

For the investment, oil and gas reserves already found by the ONGC will provide a return of approximately Rs 60-70,000 crores.

ONGC's future plans

A five year plan has been drawn up by the ONGC covering the Sixth Plan period (1980-85) to accelerate the pace of work. This plan envisages the following:

The drilling of 95 exploratory wells and 229 development wells. For this drilling effort, the ONGC's present fleet of three owned rigs will be increased to 7 by end 1982.

The number of platforms to be installed will be about 50. Since the working season of offshore India lasts for 6-8 months, this implies that the ONGC will be on an average installing one platform every month for the next five years. Besides the platforms, there will be need for 300-400 km of submarine pipelines to interconnect these platforms.

With these efforts, the ONGC plans to produce about 52 million tonnes of oil during the five year period, thus providing a foreign exchange saving of Rs 10,000 crores in this period in crude oil alone. Based on present plans, the peak rate from known fields today will rise from the present five million tonnes/year to about 13.2 million tonnes/year in 1985.

In order to accelerate the production from offshore region, an accelerated plan for production has already been submitted to the Government and an accelerated exploration plan is under submission. These programmes envisage oil production of over 63 million tonnes during the plan period and drilling of 107 exploratory wells.

As far as gas is concerned, the ONGC's plans are to a large extent dependent upon the plans of the downstream uses of the gas. The total gas production, as presently planned, envisages the availability as 2 MMCMD by 1981, 2.88 by 1982, 3.6 by 1983, 8.6 by 1984 and 13.6 by 1985. Plans for LPG from the gas envisage an increase from 10,000 tonnes/month in early 1982 to about 19,000 tonnes/month in 1985.

It is, however, important to note that the above plans are based on discoveries made to date. Should the finds in R-7, Andamans and Godavari prove to be commercially viable, ONGC's plans would increase even further and the present outlay of Rs 1,837 crores for the five-year period may well have to be increased substantially.

Indigenisation—problems and prospects

The large investments that will be required for the development of India's offshore fields clearly present a major opportunity for the Indian industry. The problems and the prospects for such indigenisation, however, need to be examined in the context of both the structure of the international offshore industry today and the specific requirements of the Indian situation. Two major objectives for India are, one, to develop its offshore hydrocarbon resources in a phased manner so as to optimise its total returns from these discoveries over a time period and two, to increase the amount of indigenous content in these projects of both hardware and software — so as to provide opportunities for the utilisation of the capacity and capability built up within the country within the confines of the requirements of the projects.

The internal structure of the offshore industry places its own additional constraints on what can be done to attain those objectives. As has been indicated above, offshore development programmes are extremely capital-intensive. Moreover, the investment decisions have often to be made before all the required data are available in order to hasten the process of development and returns. This implies that certain uncertainties are inherent in the situation, and since the costs are so high, decisions require both a great deal of courage and ability to take risks.

As one result of this, most agencies who are just entering the offshore industry express a desire and need for entrusting the responsibility of setting up offshore production systems on a 'turn-key' basis. Normally, this desire of the clients for single-point responsibility is reflected in the development of 'consortiums' among the contractors. Given the structure of the offshore industry, and the relative risks involved, such consortiums are usually led by the offshore installation contractors.

The major source of profits for the installation constructors who have invested heavily in the expensive derrick- barges, cranes, pipelay vessels *etc* lies in their maximum utilisation of their construction equipment rather than in fabrication or equipment supply. Many of the international contractors in this industry have integrated backwards into fabrication of platforms or their engineering only in recent years, and that too has been with the prime objectives ot meeting customer demands for single-point responsibility and/or tight time targets. These installation contractors normally do not manufacture or produce 'in-house' even 10 per cent of the equipment which goes into offshore production system unless they operate their own fabrication yards. Thus almost all the equipment required are purchased by them from outside manufacturers. Over the years, each installation contractor may have established links with a specific manufacture for a specific range of equipment based on their cost, delivery and performance, but what is more visual is that the installation contractor himself goes out for competitive bids to various vendors.

The supplies of equipment for offshore production systems generally provide a completely engineered-and-packaged product. The vendors do carry out considerable pre-engineering and system engineering of their product. Special emphasis is paid to application engineering to meet any special requirements for modifications to their standard equipment for the client. Many of these equipment are mounted in 'modules' or 'skids' with all piping, electrical wiring, valving, controls *etc* all built-in. Commercial terms offered by them include guarantees as well as conformance to internationally acceptable standards of practice and codes. Spare parts, service engineers for installation and commissioning and maintenance advice have been provided generously and generally as a part of the package, Assistance for 'trouble shooting' is not only promised but given freely, sometimes at very short notice. Thus, if Indian vendors are to successfully enter the international offshore industry, they must be willing and able to provide such packages and services as well.

The stringent requirements of quality as well as the need to minimise repairs and maintenance offshore require an emphasis which is completely different from installations on land. The cost of even minor repairs or replacements offshore is out of all proportion to the actual cost of the component itself. This arises out of the heavy cost of offshore construction equipment, where even a small derrick-barge hires at Rs 3-4 lakhs per day, a single helicopter ride may be as much even as Rs 20-40,000 per trip work boat at Rs 25,000 per day.

An example will illustrate the need for detailed planning as well as the strictest quality control for offshore production systems. If an additional generator is required or if a defective part is to be replaced to produce continuous power for telemetry and telecontrol after the production system has been installed, the cost to be client may be as high as Rs 1,600,000 although cost of the generator may only be Rs 160,000. This is due to the fact that a small derrick barge crane may need to be mobilised from Singapore or the Persian Gulf at a daily cost of Rs 160-180,000. And if this unit requires some welding to be done, the entire production on that platform may have to cease from safety consideration — thus increasing even further the costs to the client. This will hopefully underscore the need for the highest quality standards and reliability in equipment used on offshore production platforms.

The Indian industry certainly possesses the inherent capability to overcome these problems. But the indigenous industry, on its part, must gear up its technology and organisation to meet the special requirements of the offshore industry.

Prime among these, is the need for assured quality of products within the stipulated delivery dates. There is the customer requirement of system engineering of packages, skilds or modules—which could be met through formation of suitable local consortium of complementary product firms. The cost of repairs of offshore which compels the client to insist on the highest possible quality standards could be met by use of international certification agencies or quality assessment laboratories. There is, however, a need for a caution — indigenisation should not be taken to mean complete substitution. There is a need for some perspective on the part of the industry so that, for example, a small value-supplier should not hold the offshore production system to ransom.

The industry will also have to spend more time, and effort on pre-engineering, custom application engineering and on client education. Finally, potentially the most effective selling point of local industry — and today paradoxically its weakest link — is the after sales and maintenance services. Given its proximity as well as the cost of technical manpower, indigenous industry has an in-built competitive edge which it has yet to exploit effectively. The country's offshore oil programme provides a unique opportunity for the development and growth of indigenous capabilities and industrial capacities. It is a challenge that I am sure the indigenous industry will be able to meet.

In conclusion, the major issues that have been highlighted above, could be summarised as follows:

— There are considerable hydrocarbon resources still to be discovered — particularly offshore.

— These resources will be found in smaller pools, deeper waters and harsher environments but given requisite capital, technology and management can be economically exploited.

— Offshore oil exploration is a high-risk, high investment and high returns venture.

— ONGC's performance to-date has been comparable to any in the offshore oil industry and it has already discovered hydrocarbons, at international prices of over Rs 60,000 crores.

The ONGC in 1980-85 will be undertaking a major expansion in its offshore effort with an investment of Rs 1,837 crores, which will result in a saving of about Rs 10,000 crores in the same period.

This programme will provide a major challenge and opportunity to th Indian industry.

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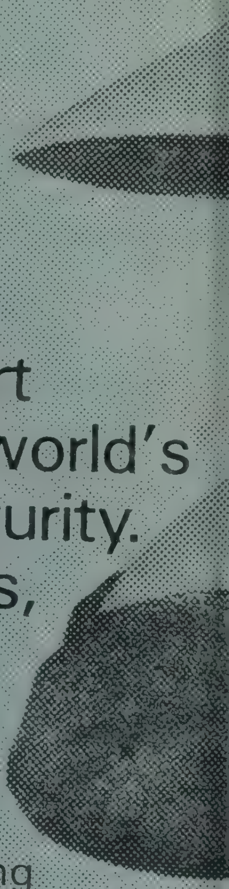

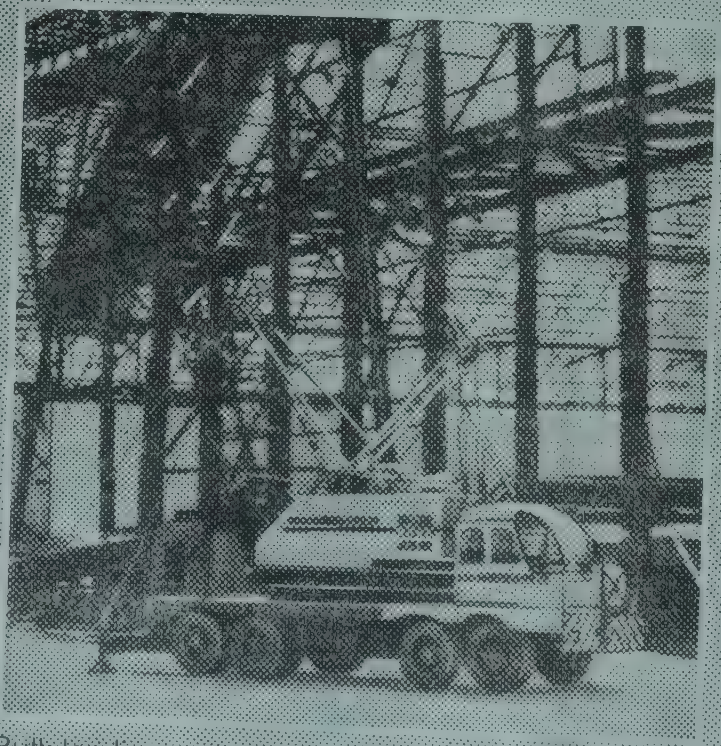

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Growth and prospects of onland exploration

By **H.G.T. WOODWARD**, *Member (Onshore), ONGC*

THE search for oil in India began seven years after the first oil well was drilled in Pennsylvania, USA by Col. Drake in 1859; efforts, however, were earlier confined to the upper Assam Valley only. The Government's policy towards oil exploration at the national level took a concrete share around 1955-56. About the same time, the industrial policy resolution of April 30, 1956 was passed, which placed mineral oil in Schedule 'A' stating clearly that "future development of oil industry will be the exclusive responsibility of the State". The Government of India created a petroleum division within Geological Survey of India (GSI) in 1955 for oil exploration work. Soon the petroleum division of GSI grew into a Directorate of Oil & Natural Gas Commission which was raised to the status of a Commission on August 14, 1956. The Commission was later converted into a statutory body on October 15, 1959.

In the twentyfive years since its inception the ONGC has matured into one of the technologically self-sufficient oil companies among the developing nations. It is one of the few oil companies in the world engaged in every aspect of oil exploration, drilling and production. So far (till June 1981) about 3½ million metres and 1,689 wels have been drilled in onshore areas. 198 structures have been drilled of which 58 structures were found oil bearing. Starting from a production of 0.04 million tonnes in 1961-62 from Gujarat, a production of 4.23 million tonnes was attained in 1980-81. Cumulative production of oil and gas from onshore areas amounts to about 68.31 million tonnes and 7,551.80 million cubic metres respectively. A large number of wells have been drilled and tested onshore in Gujarat (1,268 wells), Assam (351 wells), Tripura (5 wells), Meghalaya (2 wells), Nagaland (3 wells), West Bengal (6 wells-, Uttar Pradesh (4 wells), Bihar (2 wells), Punjab — Himachal Pradesh (10 wells), Tamil Nadu and Pondicherry (18 wells), Jammu & Kashmir (3 wells), Andhra Pradesh (1 well) and Rajasthan (16 wells), but significant discoveries of hydrocarbons in commercial quantities have so far been made in Gujarat and Assam only. Presence of hydrocarbons has been established in Rajasthan, Tamil Nadu, Andhra Pradesh and Himachal Pradesh; so far these have not been proved commercial.

Several new techniques like extensive use of digital units for seismic data processing, continuous computerised pressure prediction during drilling of wildcat wells, induction of new indigenous sophisticated electrical rigs etc have been introduced in onshore areas. Digital logging units were recently introduced for effective formation, evaluation and reservoir monitoring. Also several new fields like Jhalora, South Sobhasan, Viraj, Jothana, South Santhal, Motwan, Sisodra in western region, Amgurai and Charali-6 in eastern region have been brought under production. The scope of exploration has been broadened and intensified by seismic coverage in Gandak depression, Surma Valley, Krishna Godavari and Cauvery basins.

In 1974-75 an Indo-Soviet team carried out a study of onshore basins (1.4 million sq km). Thirteen prospective basins have been identified by the team, and this forms the basis of prospect categorisation and input distribution for future plans.

Based upon the above assessment an accelerated programme of exploratory drilling has been initiated in the producing basins of Cambay and upper Assam, and the highly prospective areas of West Bengal, Tripura and Krishna Godavari.

According to the present day knowledge and known technology

estimated that the following is the remaining quantum of regional seismic survey to be completed :

	Area/Basin	(In line km)
1.	Ganga Valley and Himalayan foot hills	4,000
2.	Rajasthan :	
	(a) Jaisalmer District, ...	2,000
	(b) Bikaner Nagore basin ..	1,000
3.	West Bengal	1,500
4.	Tripura and Mizoram	1,500
5.	Krishna Godavari	500
6.	Cauvery	2,000
7.	Assam	2,000
8.	Cambay basin	2,000
	Total	16,500

To complete the above task it is proposed to increase the number of seismic parties to 35 and also improve the technology to increase their output. This will enable ONGC to grade the basin sectors accordingly to their prospects.

The onshore activities are divided into three sectors' regions namely Western Region, Eastern Region and Central Region. In brief the prospects and future programme of work envisaged in these regions are indicated below :—

Western Region

The Western Region areas include Cambay basin in the State of Gujarat together with Kutch and Saurashtra. Cambay basin is a maturedly explored basin; it is now sought to :—

a) Explore for subtle traps in known producing areas;

b) explore for deeper prospects (Ankleshwar deep well); and

c) extend exploration to lesser explored parts of the basin (Tarapur and Broach blocks).

It is proposed to increase the num

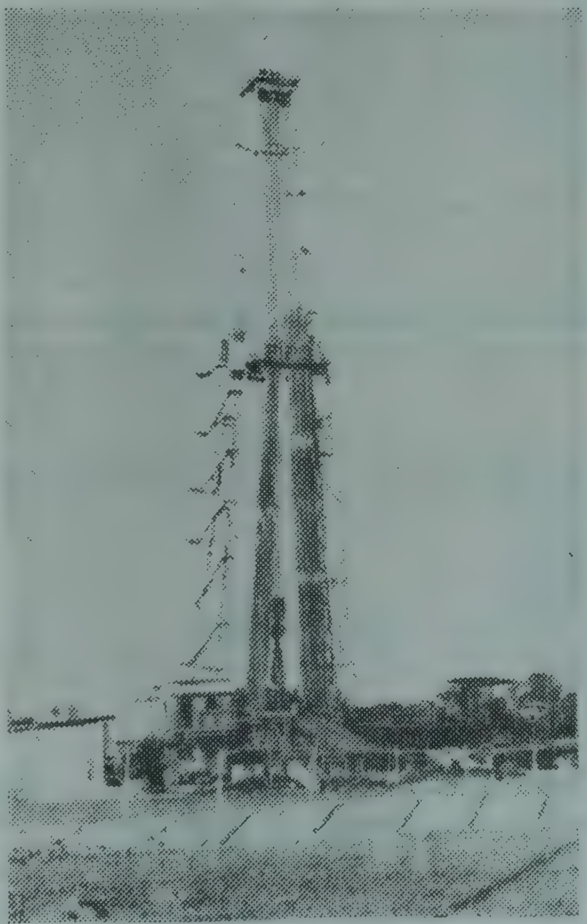
80 (field season) to 10 by 1984-85. Besides, one contract seismic party is proposed to be deployed in the highly prospective shoal areas during 1981-82 and 1982-83, season. In the current five years 1980-85, it is proposed to deploy 14 to 15 rigs and to undertake drilling of 249.7 thousand metres of exploratory drilling and 250.3 thousand metres of development drilling. All these exploratory efforts are directed towards establishing at least 20 million tonnes of additional recoverable reserves during the five year period. Regarding production of oil and gas from this region, so far 58.81 million tonnes of oil and 7,507.63 million cubic metres of gas have been produced.

However, Ankleshwar field in Gujarat which supplied the bulk of the onshore crude oil is on the decline. A team of Soviet experts has studied and recommended a development programme so as to recover the maximum possible crude oil from this field-this programme is under implementation. The crude produced from Ankleshwar is highly valuable for the preparation of detergent alkalytes in petro-chemical plant at Baroda. It was, therefore, considered necessary to produce this crude from a longer period as far as possible to meet the requirement of Indian Petro-chemicals Corporation.

The production from North Gujarat fields is being kept at 1.4 million tonnes per annum throughout the five year period 1980-85. This will be stepped up when the catalytic cracking unit at Koyali is set up to handle higher quantities of LSHS crude. During the five year period the annual production from this region will range between 3,00-2.80 million tonnes per annum. Various enhanced recovery techniques like trial water flooding in Nawagam field, selection of appropriate polymer for injection in Sanand field and also thermal flooding in Balol-Santhal field are planned to improve recovery from these fields.

Eastern Region

This region is considered to be highly prospective. About thirty structural features have been identified in this area so far. Twentyeight structures has been undertaken for drilling, of which, hydrocarbons have been found in eight structures. The thrust of further exploratory efforts in this area is proposed to be directed towards the Naga foot-hills in the Surma and Dhansiri Valley. During the current five year plan it is proposed to increase the seismic parties to eight. The tempo of drilling activity is also planned to be increased by gradually increasing the number of drilling rigs from 12 in 1980-81 to 18 during 1984-85. The quantum of exploratory and development metreage envisaged during the five year period is 300 thousand metres and 330 thousand metres respectively.



An onshore rig.

The production of crude oil from this region is planned to be increased from 1.7 million tonnes per annum in 1980-81 to 3 million tonnes per annum in 1984-85.

Central Region

On the basis of present day knowledge, four basins of the Central Region are considered to hold the maximum potential *viz* Godavari, West Bengal, Cauvery and Rajasthan. In Godavari two rigs are operating at present. The rig strength will be gradually raised to four rigs. In West Bengal two rigs (1 deep and 1 medium capacity) are at present deployed. Here again it is planned to further intensify the exploration activity by deploying three rigs. A US consultant has been engaged for preparing a delta model of West Bengal and to suggest further lines of work. It is proposed to re-enter the Cauvery basin for the further exploration.

Available data of Cauvery basin has been reviewed by a well-known US petroleum geology consultant and based on his recommendations further exploration will be carried out. In Tripura 3-2 rigs will be deployed during the plan period.

The total exploratory metreage in Central Region areas will go up from 17,300 in 1980-81 to 57,000 in 1984-85. The total number of rigs will go up from seven in 1980-81 to 15 in 1984-85. During the next five years 51 wells with a total metreage of 202,000 are planned to be drilled in Central Region areas. It is proposed to increase the tempo of geophysical survey work also in Central Region. The total number of seismic parties will go up from 18 in 1980-81 to 20 in 1982-83. A contract party will carry out teleseismic 'eD work in Himalayan foot-hills during 1980-81 and 1981-82 season. In the Sunderbans area about 2,000 line km of seismic surveys have been completed in the shallow water zone by a foreign seismic party on contract. Further work in the shallow water area is currently progressing. Joint Indo-Soviet seismic parties are planned for Tripura and West Bengal areas during the plan period.

Thus a systematic approach to explore and exploit the prospective sedimentary basin in onshore areas of the country has been formulated for the next five years.

DYNAMICS OF OIL INDIA (OIL)

Young in years but rich in experience, Oil India (OIL) harmonises optimisation of resources with growth in the vital spheres of exploration, production and transportation of crude oil/natural gas from indigenous sources within its limited leases of 1990 sq kms in Assam, 550 sq kms in Arunachal Pradesh. Cumulative production is about 48 million tonnes which is over 40% of total from onshore resources and gross ultimately recovery expectations have crossed the 86 million mark. Pipelines have transportated over 55 million tonnes. In the new offshore concession of 12,000 sq kms in Bay of Bengal, Mahanadi Basin, granted recently, Oil India (OIL) has drilled two wells—Mahanadi 1 and Mahanadi 2.

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Processing of Bombay High crude

By A SPECIAL CORRESPONDENT

WHEN the Bombay High offshore field was discovered in 1974, it became obvious that this newly discovered crude should be first refined in the refinery of Bharat Petroleum Corporation located at Bombay, in view of its close proximity to the field. Additionally, this refinery offered maximum flexibility and versatility on account of its design features and the absence of lubricating oil manufacturing which called for special grades of crudes. The first parcel of Bombay High crude was received in July 1976, by tanker, and was processed in the same month. Thereafter, increasing quantities of Bombay High crude were received by tanker till July 1978, when the refinery was connected to the field by a pipeline *via* the ONGC installations at Uran. Since then, increasing quantities of Bombay High crude have been received and processed in this refinery. This article reviews the problems that arose in the processing of Bombay High crude and how these were overcome.

Quality

The Bharat Petroleum Corporation refinery was designed to process crude oils originating in the Middle East. These crudes were having medium gravity, *i.e.* of the order of 34° API, comparatively high in sulphur content, low in aromatics and rich in asphaltenes. When processing the Middle East crudes, the refinery produced satisfactory grades of kerosene and jet fuel, high speed diesel oil, fuel oil, bitumen and solvents. The naphtha fraction was suitable for its use as naphtha cracker feedstock but needed additional treatment for the manufacture of motor spirit.

On the other hand, Bombay High crude is light (38 to 40° API), contains very little sulphur, is rich in aromatics (about 23 per cent volume) in the gasoline/kerosene range and contains large percentage of wax in the heavier ends and has very low asphaltene content. Because of the high wax content, the crude has a high pour point (around 30°C) which meant that at temperatures below 30°C, the crude would tend to gel and remain in the solid state. This meant the crude had to be heated to make it fluid and pumpable.

The high aromatics in the gasoline/kerosene range make it unsuitable for producing hexane, petrochem naphtha, and ATF (jet fuel) without special treatment. Similarly, high wax and low asphaltene content make it unsuitable for manufacturing bitumen (asphalt) and conventional fuel oil. In the last case, low sulphur heavy stock (LSHS) gets produced as an alternative. Except for being waxy and, therefore, requiring heating, LSHS can be considered to be an excellent fuel for furnaces and boilers, and would largely help to reduce SO_2 pollution of the atmosphere.

On the other hand, since the BH crude is light (this means a high distillate content which the country badly needs) and has low sulphur, it can be considered to be a premium quality crude. The naphtha fraction from this crude, being rich in aromatics and aromatic precursors, would form an excellent feedstock both for the production of premium grade motor gasoline as well as the production of aromatics such as benzene, toluene and xylenes. In fact, in the international market, this high aromatic naphtha would rate as a premium grade naphtha. Secondly, the low sulphur content of the crude offers several advantages, *viz* (i) less equipment corrosion, (ii) longer equipment life, (iii) lower maintenance costs and (iv) reduced environmental pollution.

Problems encountered

So far as problems that arise in its processing are concerned, they can be divided into three.

1. *Handling of crude and certain of the fractions*

Because BH crude had high pour point on account of its high wax content, the storage tanks that received BH crude had to be provided with steam heat coils. Similarly, the heavy ends, *i.e.* the bottom fraction of the crude which contained most of the wax had to be provided with similar heating coils. The lines handling the crude and these products had to be steam traced.

2. *Product specifications*

Because of the high aromatic content/wax content and low asphaltene content, several products such as ATF, fuel oil and solvents could not meet the market specifications. Even though, if the refinery had additional process units, jet fuel of satisfactory quality could be made, in the absence of such processing capacity, alternate means had to be found.

PACKAGE BOILER

Fig 1: Package boiler.

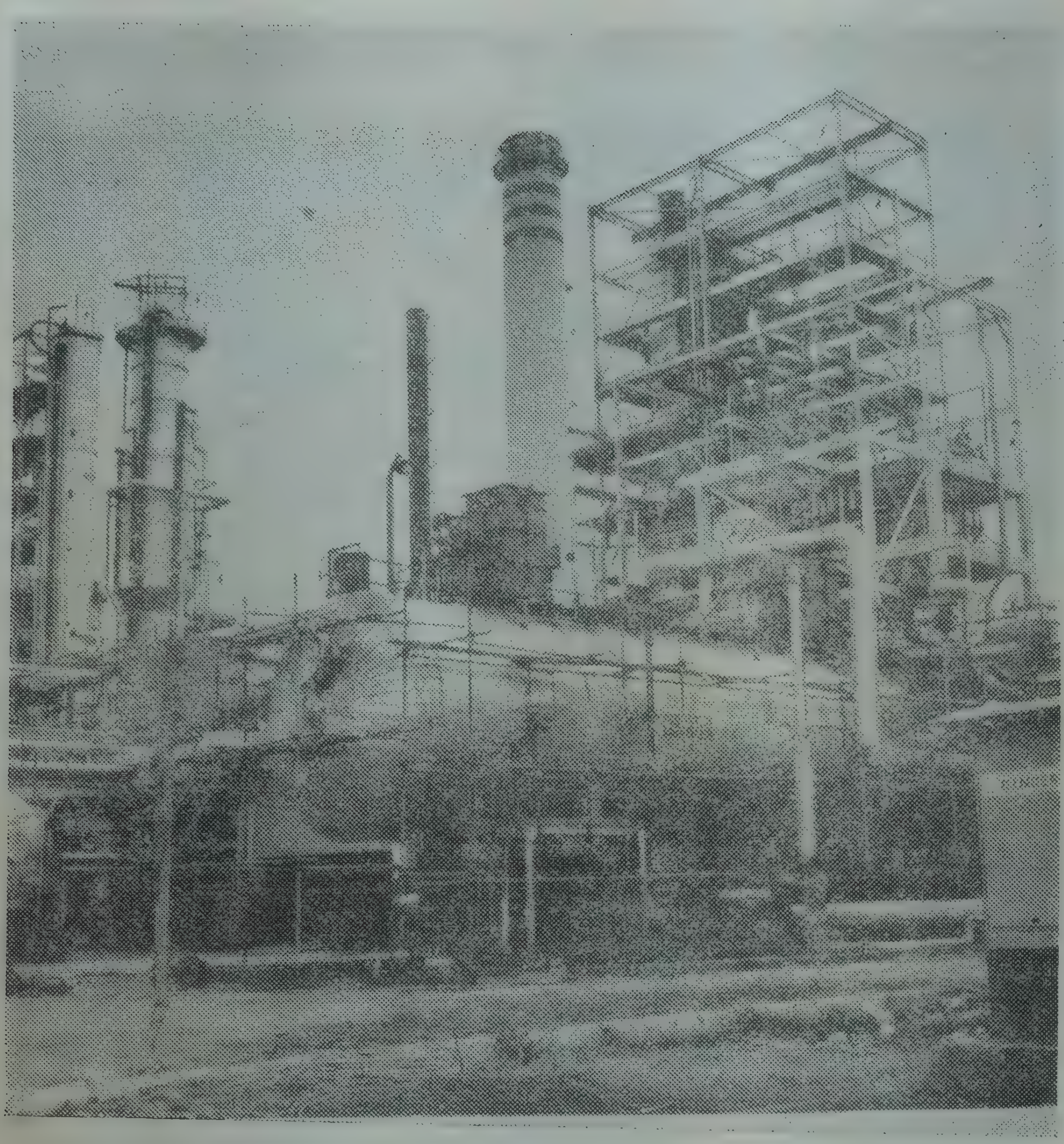

Fig 2: Electric desalter.

3. *Product pattern*

When BH crude was processed, it was found that the crude yielded a set of products considerably different from what an ME crude provided. Therefore, to maintain the original product pattern which, incidentally, was tailored to the requirements of the market, assistance had to be obtained from the next-door Hindustan Petroleum refinery which continued and continues to process Middle East crudes.

Modifications carried out

Since, as mentioned above, processing of BH crude in BPC refinery (which is designed to process ME crude) poses certain difficulties, steps were taken to implement certain modifications in the refinery and addition of certain facilities to overcome these problems. These were done with the refinery in operation and for convenience were carried out in three phases.

1. In Phase I, provision was made for heating of pipelines carrying this crude and all six tanks required for its storage. Steams coils were installed in these tanks and the pipelines were steam traced. A new oily water drainage and melting pit for the disposal of sludge ex-BH crude were provided in the crude tank farm. A package boiler to provide the additional steam (15 tonnes/hour, 15 kg cm^{2} — see Figure 1) and an electric desalter (see Figure 2) to remove water and salt from the crude were installed. Additionally, some reallocation of tanks was also made.

2. In Phase II, the remaining seven crude tanks were provided with steam coils, a second oily water drainage and melting pit for crude sludge provided, steam tracing of the remaining crude lines and certain product lines carried out, and new storage tanks and disposal facilities for a new product called low sulphur heavy stock (LSHS) provided. These included a new tank, new pumphouse (No 2A—see Figure 3), modifications to lorry loading gantry, a new weighbridge and another high pressure boiler of 30 tonnes/hour capacity.

3. Phase III. To restore the product pattern of the refinery as much as possible, it was decided to transfer certain fractions from the HPC refinery to the BPC refinery and give some fractions to HPC refinery for their operations such that both the refineries would benefit. For example, the HPC refinery would provide low aromatic naphtha suitable for naphtha cracker, raw fractions for producing solvents and bitumen. On the other hand, BPC refinery would provide cracker feedstocks and produce additional quantities of motor spirit which otherwise would have been produced in the HPC refinery. In the near future, in the same vein, additional quantities of ATF would be pro-

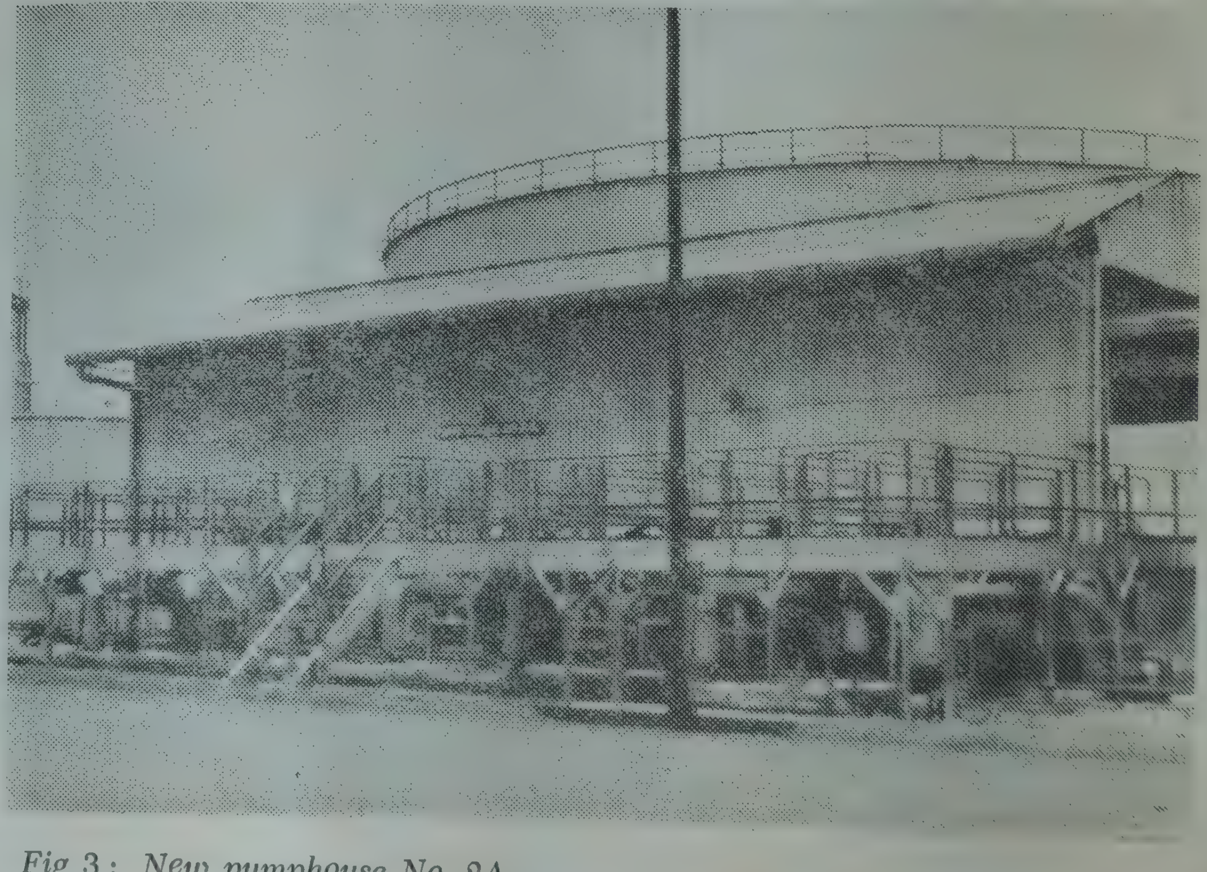

Fig 3: New pumphouse No. 2A.

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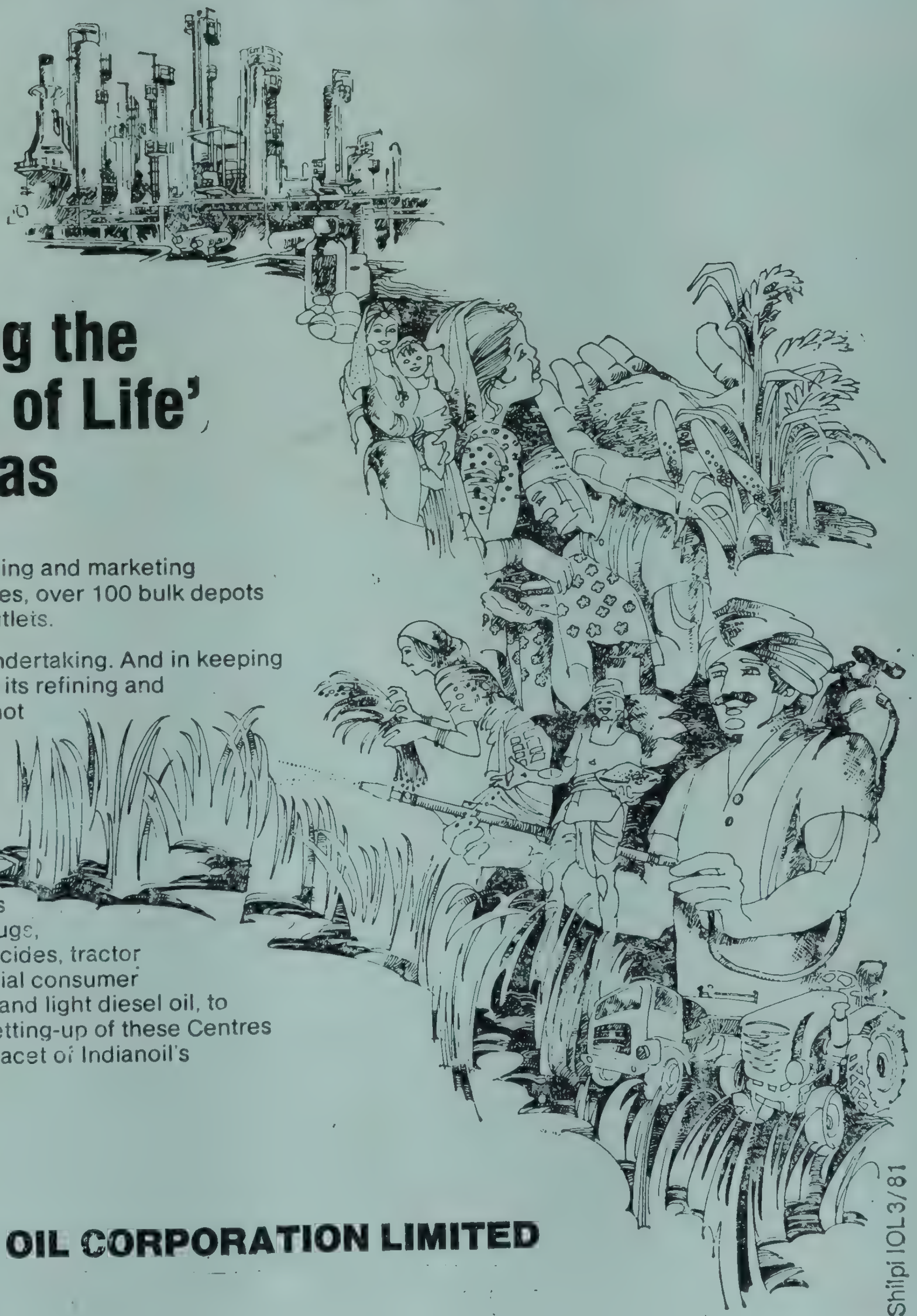

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duced by blending streams from both the refineries. One particular facility added is the transfer of Vacuum Tower Bottoms (VTB) from HPC to BPC for the production of bitumen. As mentioned above, BH crude cannot yield any bitumen. The BPC refinery, in turn, has added the necessary furnaces (see Figure 4) and steam trace pipelines.

Quantities processed

In summary, since BH and ME crudes are complementary in several respects, transfer of streams between the refineries would optimise the operations and product mix between the two and enable the requirements of the market to be met much better than otherwise. It is interesting to mention here that approximately Rs 8 crores have been spent during the last four years in modifying the BPC refinery to handle BH crude and also for transfer of raw streams, etc. BH crude actually processed by BPC refinery during the last five years is given beolw:

	Million tonnes
1976	... 0.16
1977	... 1.17
1978	... 2.52
1979	... 3.73
1980	... 3.29

Major projects under implementation

Since the BH crude provides excellent feedstock for the operation of a cat cracker to produce more distiller oils and motor spirit at the expense of heavier ends, the refinery is implementing a major scheme for the installation of an additional cat cracker. This scheme also includes necessary changes in the crude distillation unit to enable the refinery to process, if necessary, six million tonnes/year of BH crude which, incidentally, is the refinery's maximum capacity. Similarly, the refinery is progressing a project for the production of aromatic chemicals such as benzene and toluene.

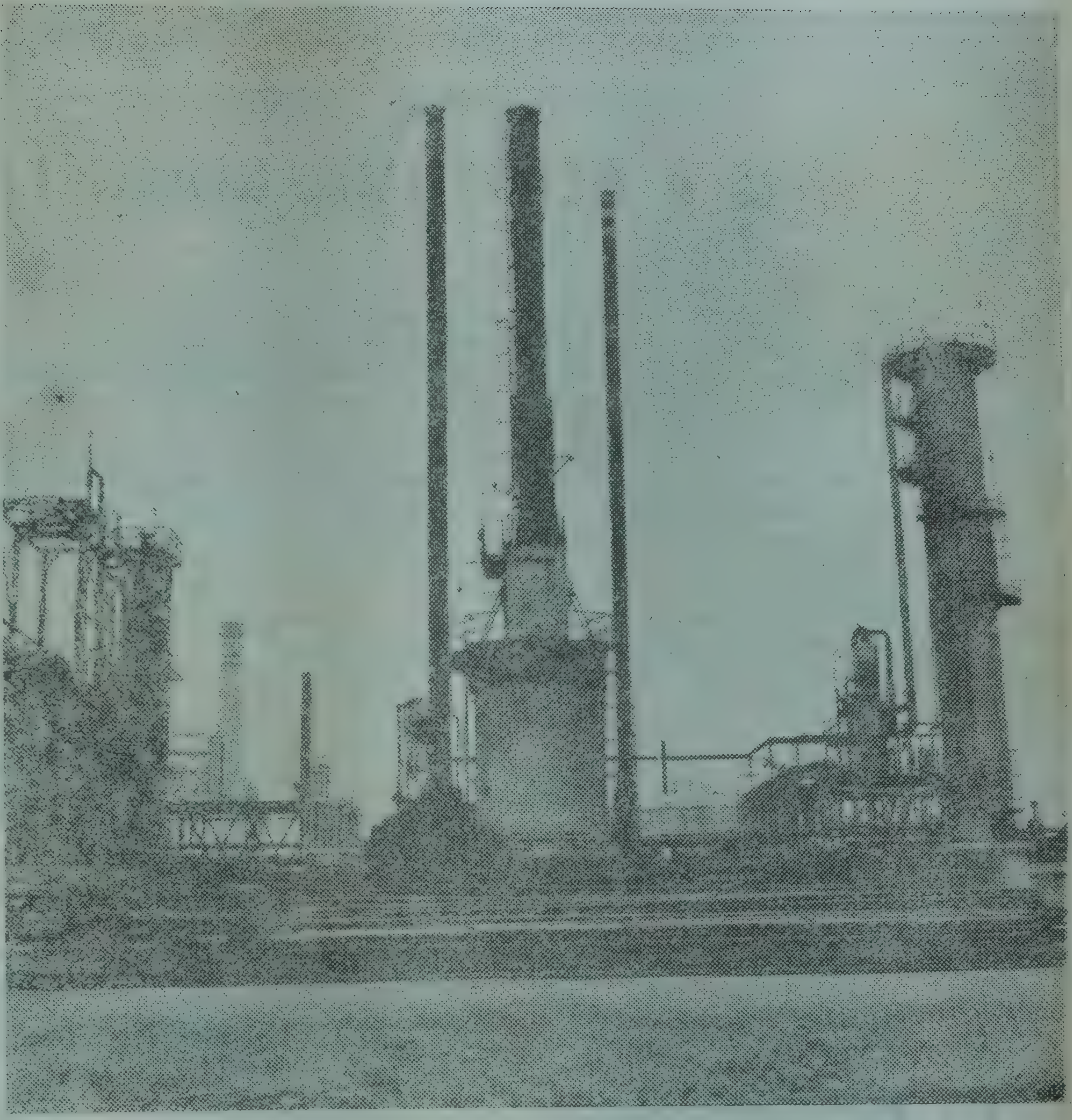

Fig 4: VTB furnace.

LPG from associated gas

Along with the production of BH crude in the offshore field, a certain amount of gas associated with this crude is also produced. This gas is compressed and sent by submarine pipeline to Uran, where a new gas processing plant has just been inaugurated. In this plant, the associated gas is separated into different streams, one of which is LPG. This LPG is then sent by an overland pipeline to the two Trombay refineries. BPC refinery has already set up facilities to store, fill and despatch this LPG. These facilities include three big Horton spheres (1,300 tonnes storage capacity each—see figure 5), a modern

Continued on page 32

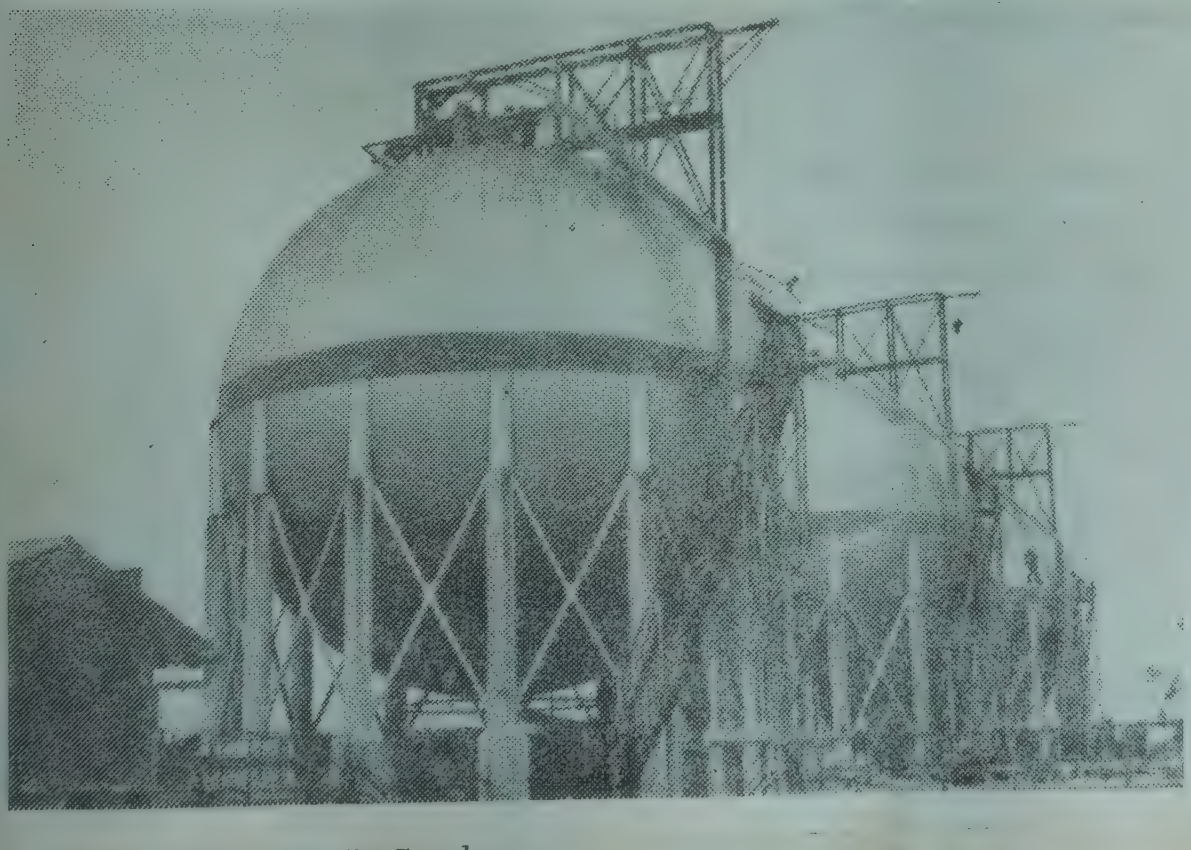

Fig 5: Three big LPG spheres.

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These oil field equipment conform to American Petroleum Institute specification and in fact BHEL has earned the right to use the API monogram on its equipment. BHEL has already supplied sid rigs to Oil & Natural Gas Commission. The first one has been used by ONGC for wild-catting in Narsapur, Andhra Pradesh. This has struck gas holding out hope of oil find in the region. The second rig has also been deployed here.

BHEL rigs are presently being deployed in Assam, Gujarat and West Bengal also. To Oil India, BHEL has supplied a rig which was completely developed by it and capable of drilling upto 16000 feet. BHEL today is fully geared up to deliver a wide range of oil field equipment.

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Drilling equipment for oil exploration

By **S. N. SHARMA**, *Engineering Development Manager (Oil-field Equipment), BHEL, Hyderabad*

THE oil and gas exploration started in our country in the year 1866 and the first producing oil-field was established in Assam. Soon after independence, in 1956 the Government of India established the Oil and Natural Gas Commission to carry out oil exploration activities throughout the country.

Because of global oil crisis of 1974, the Government of India decided to expedite the country's oil exploration programme to achieve self-sufficiency in this vital source of energy. The exploration activities were intensified throughout the territory of India, including offshore areas. Due to worldwide increase in demand of drilling rigs, a strong need was felt to establish manufacturing facilities for oil drilling rigs in India. Bharat Heavy Electricals Ltd (BHEL), a pioneer engineering and manufacturing organisation was entrusted with the responsibility of indigenously manufacturing diesel electric drilling rigs.

After an evaluation of technologies available in the world for design and manufacture of diesel electric drilling rigs, BHEL entered into a technical collaboration agreement with USS Engineers and Consultants, USA, for technical know-how of some of the vital mechanical components of the rig.

Today, BHEL is manufacturing draw-works, rotary, swivel and travelling blocks to USS Oilwell design, mast and substructure to Skytop Brewster design and mud system to HSMC design. The mud pumps supplied with BHEL rigs are also to USS Oilwell design manufactured by Bharat Pumps and Compressors Ltd, Allahabad, another Government of India undertaking.

The power pack and electrical controls for the rig were independently developed by BHEL with the expertise available within the company. In this task, CMRS and DGMS provided valuable guidance to make components of electrical system suitable for operation in hazardous atmosphere of oil fields.

The design and development of equipment for oil field application by adding new equipment to the product profile or by way of extending range of existing equipment has been a continuous process in BHEL. As a result E-1,400 type of rig has already been added to our product profile, in addition to E-2,000 and E-760 type of rigs for which design was obtained through technical collaboration. The development projects in hand for oilfield application include mast and substructure of 770,000 lb capacity, work-over and mobile drilling rigs and thyristor drive system for electrical controls. In this job of designing and developing new components and systems of oilfield application, the Oil and Natural Gas Commission and Oil India Limited have given immense help and provided useful information on functional and operational requirement of the equipment.

BHEL offers rigs suitable for drilling from 3,000 metres to 6,000 metres.

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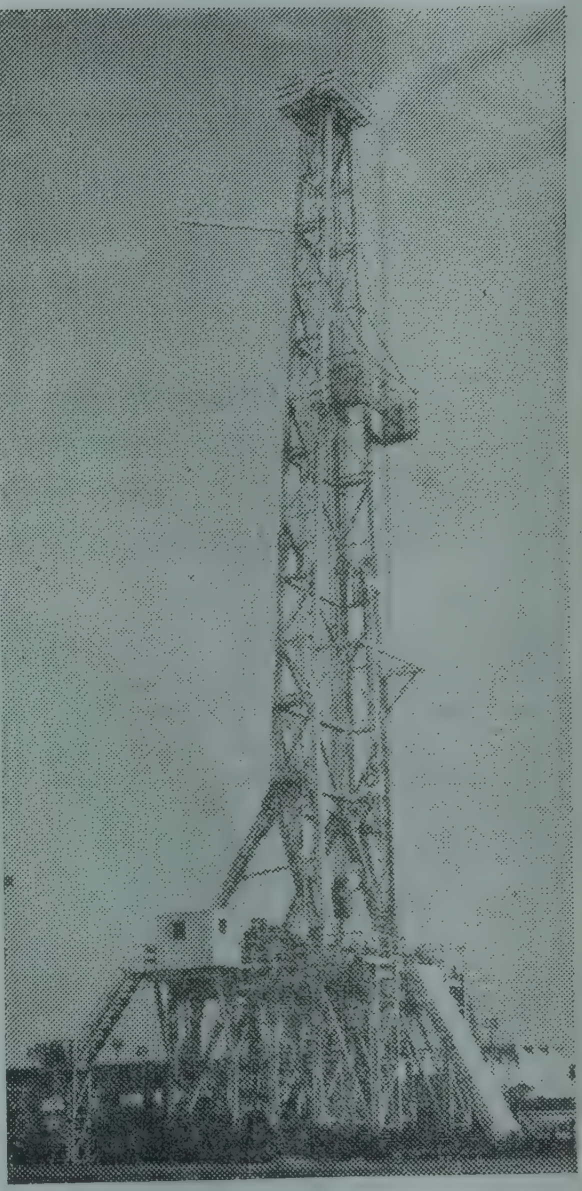
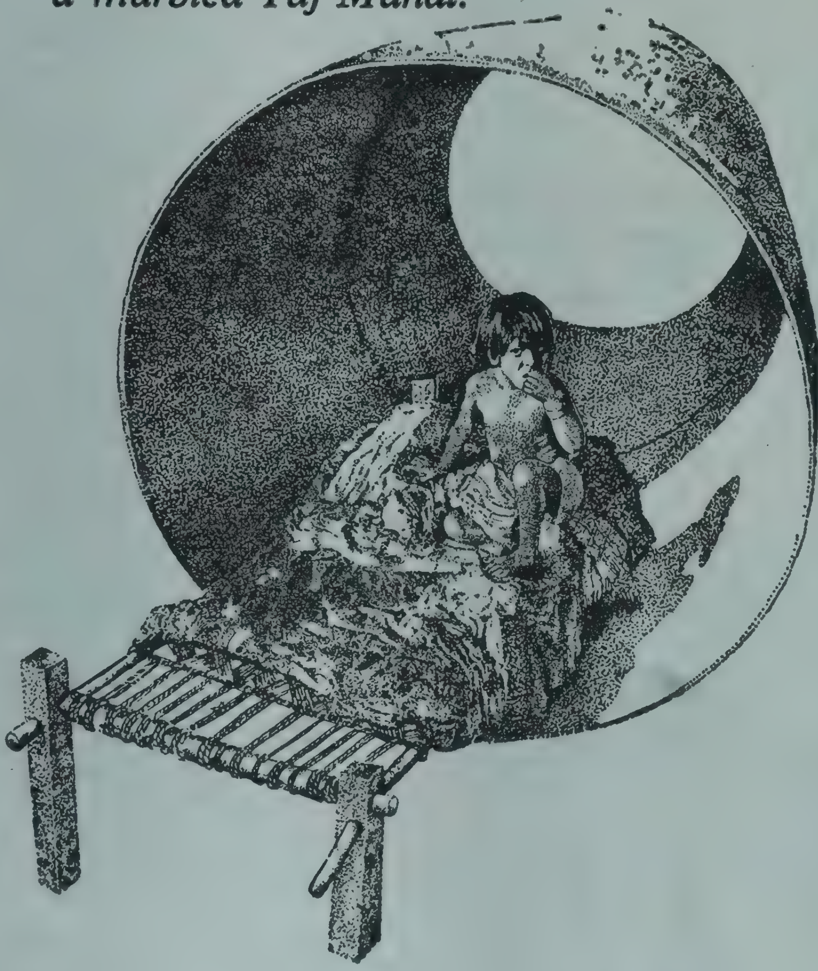


BHEL, Hyderabad, manufactures three types of oil rigs for drilling from 3,600 metres to 6,100 metres. The mast and substructure rise to a height of 51 metre.

The mast of an oil rig being elevated to its upright position.

Ours is a Magnificent Land-1

I sleep in the sewers
of my homeless cities.
But I have builded
a marbled Taj Mahal.



I hunger when famine
stalks the land.
But I have saved it
from plague and pox.

I taught my child
the arts of Science.
But I have seen him
forsake my shores.

I befoul my cities
because I will not plan.
But I have looked up
and discovered Quasars.

I see food hoarded
while my poor go hungry.
But I have made the
green revolution happen.

I never taught my children
to read nor write nor count.
But I have fathered
Nobel laureates.

I see my brother outraged
by my prejudice
But I have elevated him
to the highest office.

I flee from the farms
to the despair of my cities.
But I have held to the hope
of a hundred million jobs.

I was born to subsist
on a half-Rupee daily.
But I have died so my ashes
can enrich my loved India.

I am sad.
But I am glad.
I am.

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We must build a
magnificent future. Think Ahead.

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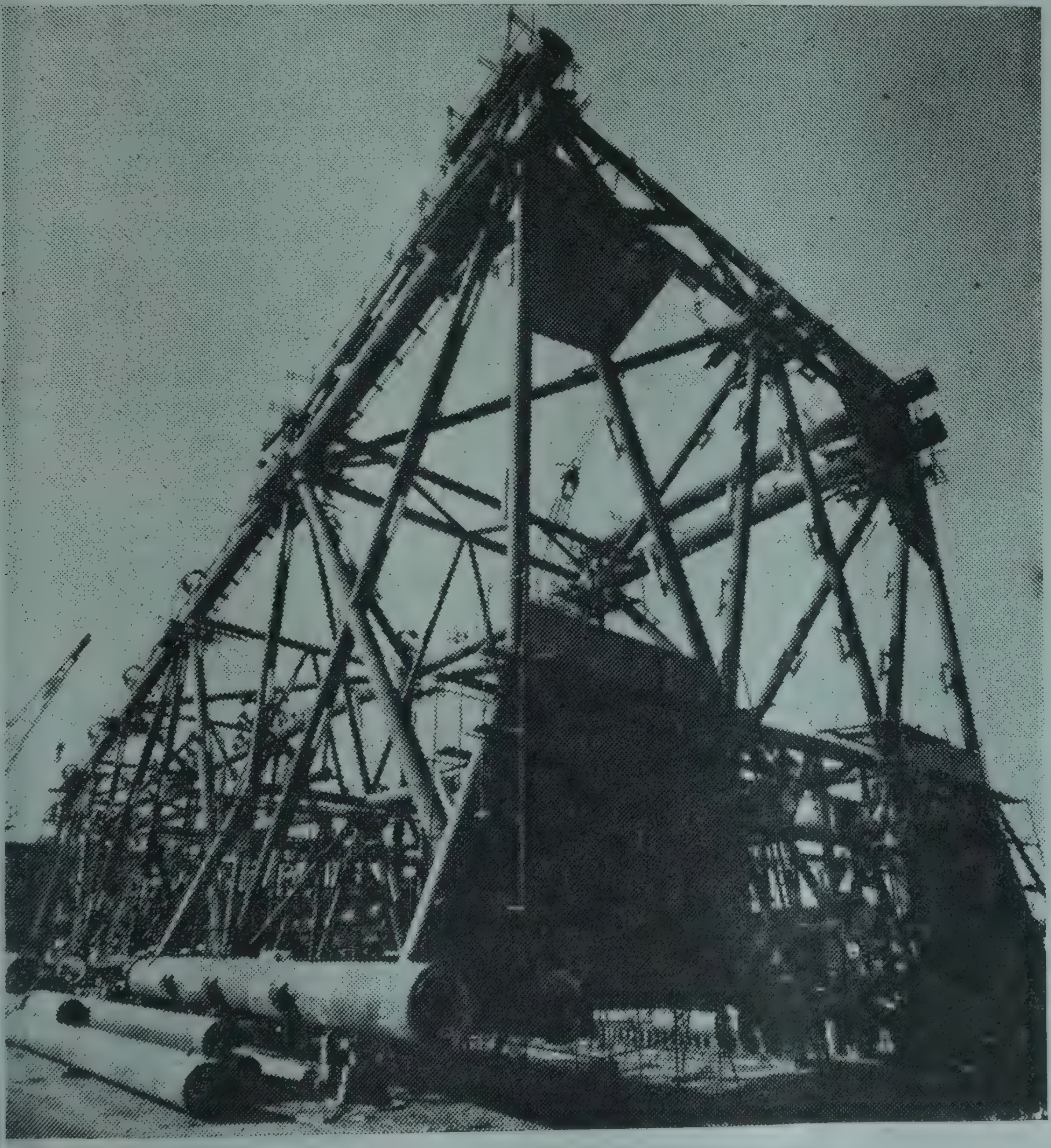
Fabricating offshore platforms

By **N. P. DUTTA,** *Crairman and Managing Director, Mazagon Dock Ltd.*

THE commencement of offshore exploration of oil in India by the Oil and Natural Gas Commission in 1973, with the drilling rig *Sagar Samrat*, marked the era of oil exploration in the Bombay High area, 80 miles off Bombay on the west coast of India. The ONGC has carried out extensive exploration work and, on the basis of their existing production programme, it is estimated that they would require about 40/50 additional platforms by April 1985. Mazagon Dock which has now gained experience in the manufacture of offshore platforms is gearing itself to meet a very major portion of requirements of ONGC.



Jacket of an offshore fixed platform under construction at Mazagon Dock.

Having struck oil offshore in sufficiently large quantities to justify large scale involvement in recovery and exploitation, the search was on to find a fabricator in India for offshore platforms. The major requirements of a fabrication yard of this nature are:

(i) Availability of an organisational infrastructure, managerial capabilities, technical and a highly skilled labour force conversant with heavy steel structural welding work to international standards which can stand up to the strict requirements of non-destructive testing.

(ii) Availability of water front with reasonable water depth to allow offshore vessels to ply to and fro and the proximity of this yard being again within economically justifiable distance from offshore exploration sites.

(iii) Availability of a large and well equipped fabrication yard equipped with heavy duty cranes.

Mazagon Dock was found to be eminently suitable as it has in abundance all the above mentioned requirements and also in view of its excellent performance and growth records.

The evolution of Mazagon Dock from a small shiprepair yard to India's leading shipbuilding yard makes a fascinating study in the history of shipbuilding in India. Set up in the 18th century, Mazagon Dock has maintained and improved upon its tradition of over 200 years of quality workmanship, speed and economy. In 1774 the first dry-dock called Mazagon Dry Dock was built. According to available records, Lord Nelson, the hero of the battle of Trafalgar, visited Mazagon Dock on board *HMS Sea Horse* in 1775-76. In fact some of the teakships built in Mazagon Dock took part in the battle of Trafalgar. Also, the oldest ship afloat today, *Foundroyant* is believed to have been built in Bombay in 1817.

The history of modern Mazagon Dock begins with its acquisition by the Government of India in 1960 and its development and modernisation for construction of large naval and merchant ships. Mazagon Dock can now build the most advanced vessels weighing up to 27,000 dwt. Mazagon Dock commenced construction of sophisticated Leander Class frigates in 1966 and so for has delivered five frigates to the Indian Navy. All these frigates are multirole combat vessels with anti-submarine, as well as surface-to-surface and surface-to-air capabilities.

Mazagon Dock has also now commenced construction of the first fully Indian-designed frigate, and Indian-designed coast guard vessels. Mazagon Dock has also constructed a luxury passenger-cum-cargo Liner *m. v. Harsha Vardhana* and a number of dredgers, barges and fishing trawlers.

MDL successfully entered the export market in shipbuilding, for the first time in India in 1974-75. Since then the company has built and delivered six general

A view of offshore project site of Mazagon Dock.

cargo-bulk carriers for the United Kingdom, two general coasters for Singapore, two large water tankers for Iran and over 100 barges for Iran, Saudi Arabia and Yemen. With this background of experience in shipbuilding, Mazagon Dock has built up a highly skilled cadre of personnel who were poised to take up heavy fabrication work like off-shore platforms. Hence, MDL took up manufacture of offshore platforms from the year 1978 as part of its diversification plans.

The manufacturing activity started simultaneously with the execution of the civil works project namely the construction of a launchway for pulling the platforms and a quay wall for loading out the jackets and decks. A fishing jetty situated just adjacent to the yard which was catering to the needs of the local fishermen was transferred to a different site. Mazagon Dock constructed a brand new jetty for the use of the fishermen while the original one was converted into a fabrication and erection area with a quay wall for load out of decks.

The fabrication yard is situated within close proximity to the finest port in India which facilitates easy and quick receipts of heavy steel plates, tubulars, and sophisticated equipment from all over the world. A 110 m long quay wall faces the waterfront with water depths of 4 metres below chart datum. The quay wall is designed to loadout a 2,000 tonne jacket and a 1,200 tonne deck. The 16 acre yard comprises six acres of covered shops and 10 acres open for erection fabrication and assembly area designed for an annual throughput of 12,000 tonnes. The shops are equipped with EOT cranes. The pipe cutting shop is equipped with two computerised Mueller-profile cutting machines for diameters ranging from 80 mm to 1,220 mm outside diameter which caters for the various complex geometrical profiles involved in TKY joints. One of the yard's greatest assets is a structural pipe rolling mill capable of rolling steel thickness up to 75 mm cold and in lengths of 3 metres. It is also equipped with semi-automatic external and internal welding booms for longitudinal as well as circumferential joints.

Two sets of pile rack system has been indigenously designed for the fabrication of large diameter jacket legs and piles in lengths of maximum 100 metres. It is equipped with four sets of semi-automatic submerged arc external welding booms. With a view to achieving higher productivity a wide range lifting equipment is provided which is capable of taking components, weighing up to 350 tonnes.

In our fully equipped welding school, highly qualified instructors have, for the past three years, successfully trained 250 welders who have been duly certified by Lloyds Register of Shipping Surveyors.

Seven platforms

Mazagon Dock has manufactured and loaded out seven platforms during the period 1978-March 1981 of which six have already been installed, complete with deck and helideck. We have already received works order for fabrication of nine more platforms. The platforms so far built are well platforms with the decks housing a range of sophisticated process, mechanical, electrical, electronic and telemetry equipment. The foreign exchange content of the equipment installed is in the region of Rs 16 million out of which Rs 4 million have been indigenised and a further Rs 4.5 million is in the process of indigenisation. Additionally Rs 6 million is being spent for import of steel.

Nhava yard

While the present yard can cater to four platforms per annum, the requirements of ONGC are 50 platforms up to 1985. Realising the need for increasing the production of platforms, Mazagon Dock has already acquired additional land at Nhava Island (off Bombay). A parallel fabrication yard in Nhava of 40 acres has been planned to cater for six to eight platforms per year totalling an annual throughput of 20,000 tonnes.

This yard is being designed for the fabrication of large steel jackets, construction and maintenance of drill ships, semi submerisibles, jack-up rigs, integrated decks, articulated columns and other large steel structures.

Eight acres of covered shop area has been planned, comprising pipe cutting, light and heavy engineering and pressure vessel, each having a clear span of 30 metres with overhead crane capacity of 125 tonnes. The pipe cutting mills is equipped with two computerised Mueller machines for cutting complex geometrical profiles.

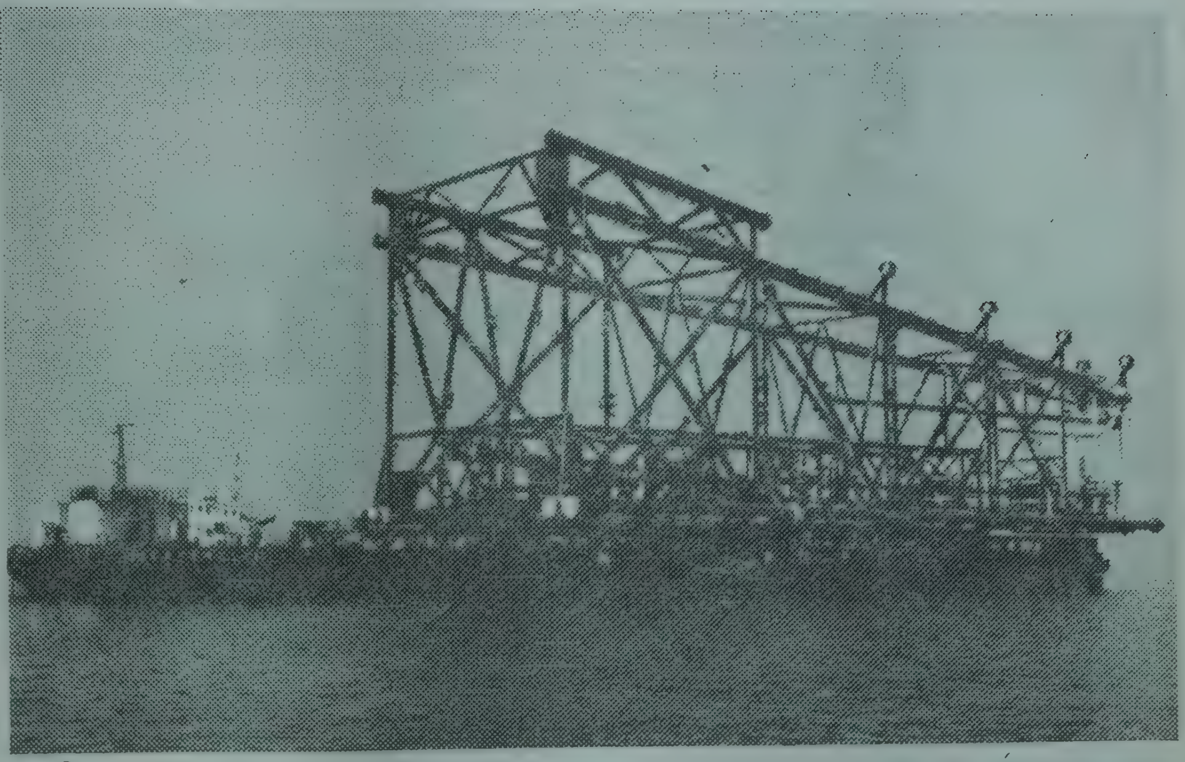
Pile rack system has been indigenously designed to cater for the fabrication of jacket legs and piles of large diameters in maximum length of 150 metres. Automatic submerged arc welding booms are fitted for external welding. Two gantry cranes of 35 tonne capacity are proposed to cater for loading, unloading and transportation of tubulars.

The yard houses four large crawler cranes of 225 tonnes maximum capacity each with material handling equipment. The yard is designed to loadout a jacket of about 6,000 tonne capacity. The quay wall has a total of 145 metres with a water depth of 8 metres below chart datum. This facility is expected to be commissioned by end of 1981. With the commissioning of the Nhava fabrication yard, Mazagon Dock will be able to deliver 12 platforms per year for the Oil and Natural Gas Commission.

Diversification plans

With the experience gained in fabrication of offshore platforms and with the skill and expertise built within the company in this field, the company is already in the process of diversifying/expanding its activities in the following related fields :

(a) Offshore maintenance and support services.



Jacket of an offshore fixed platform built by Mazagon Dock for the ONGC.

(b) Load out, transportation and installation of offshore structure.
(c) Diving cell,
(d) Research and development.
(e) Pressure vessels.

Offshore maintenance and support services

Another area which we have identified for diversification is development of offshore maintenance and support services, which is currently being contracted out by ONGC to foreign agencies. There is an ever increasing need for maintenance and support services for hook-up, repairs of equipment, supply duties, painting and preservation of offshore, NDT, cathodic protection, survey, etc.

We are planning to construct initially an offshore supply vessel for towing and anchor handling duties with capability also to act in the supply role. The vessel will be of a modern design with twin CPPS, round bilge form and be provided with bow trusters. We are also planning to construct a diving support vessel provided with saturation diving capability up to 200 m water depth, with an aeriated moonpool and provided with dynamic positioning.

We have also converted a 1,25,000 tonnes dwt tanker belonging to Shipping Corporation of India *M. T. Jawaharlal Nehru* into a storage-cum-export tanker, moored to an SBM. We fabricated and installed a large helideck on the tanker capable of landing helicopters of all up weight over 10 tonnes. We have recently been awarded the contracts for similar conversion of another tanker ***M. T. Lal Bahadur Shastri.*** We have also carried out structural modifications to some existing ONGC platforms.

The Oil and Natural Gas Commission is to acquire shortly a multipurpose support vessel, with saturation diving capability, heavy lift of 120 tonnes, with a helipad and fitted with a highly sophisticated dynamic positioning system with joystic control and redundancy. Mazagon Dock has been associated in the discussions for technology transfer for construction of follow-on vessels in India. We are hopeful of securing the contract for construction of follow-up multipurpose support vessels.

Load out, transportation and installation

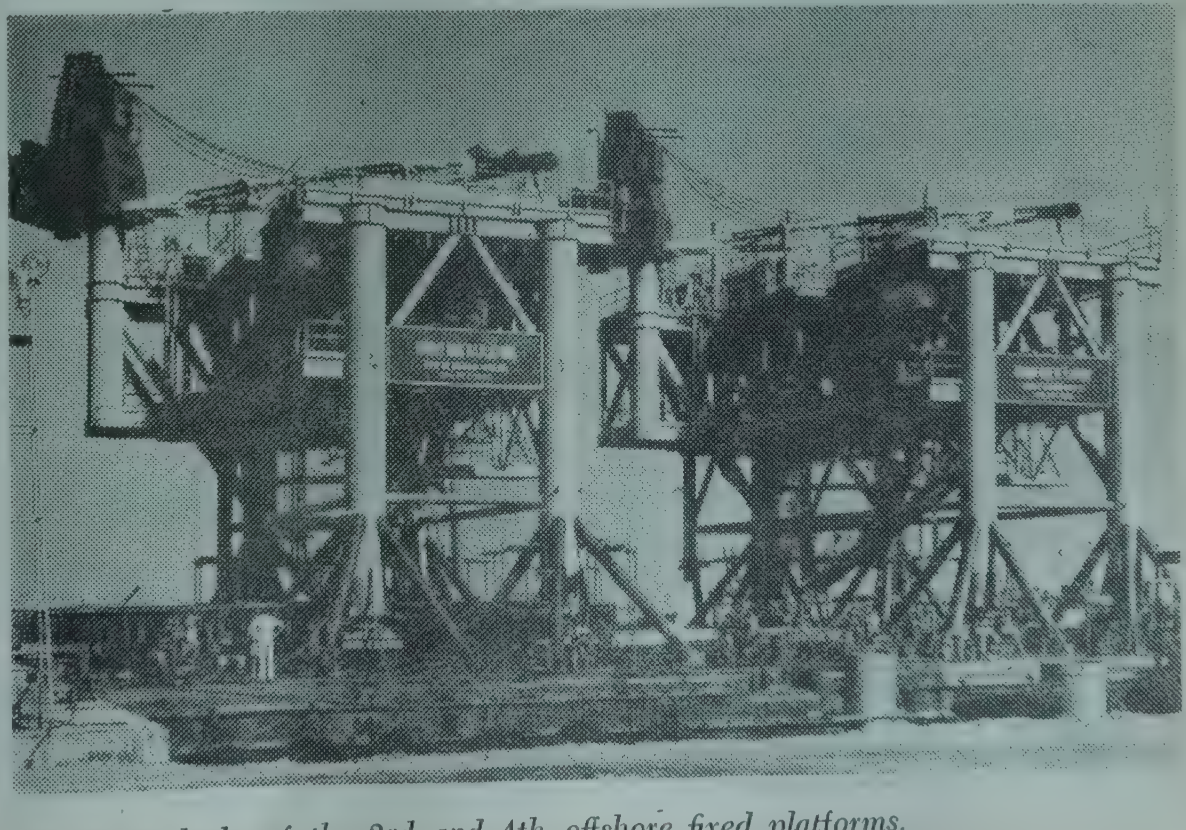
Load out, transportation and installation of offshore structures are feasible in the Bombay High area only from the month of October to end April. From May to September due to the south-west monsoon, environmental conditions preclude these operations. Presently, the load out, transportation, launching and installation of the platforms constructed by Mazagon Dock are entrusted by the Oil and Natural Gas Commission to specialist contractors. Mazagon Dock has decided to enter into this specialised area and made a beginning in 1980 by the design and construction of a cargo barge for load out of decks, modules, piles and other similar structures. The barge can be converted to use modules for working as NDT and repair boat, with some minor changes.

A jacket-launch barge capable of transporting and launching jacket weight up to 6,000 tonnes has been designed and is currently under construction. The launch barge is being built under the survey of American Bureau of Shipping.

We are also in the process of evaluating and purchase of a heavy lift derrick barge for installation and hook-up of offshore platforms. We are also exploring possibilities for technology transfer in transportation and installation of offshore fixed platforms and in-field pipelines. We have in our staff qualified masters of ocean-going vessels, chief engineers, deck officers and engineers, divers and qualified skilled labour force who can man the derrick barge after suitable initial training.

Diving

A team of qualified divers is a very necessary adjunct to offshore maintenance



The main decks of the 3rd and 4th offshore fixed platforms.

Offshore fixed platforms under construction at Mazagon Dock.

and support services. We have recruited highly skilled divers ex-Indian Navy and are building up a strong diving cell. We have entered into collaboration with M/s Wharton Williams for training our divers in execution of offshore diving work. We have recently entered into agreement with a UK firm Seaforth Maritime for fabrication and erection of saturation diving systems. We have also constructed habitat in ships for foreign contractors.

Research and development

The platforms we are constructing today are designed by Engineers India Ltd (EIL), another government of India undertaking and other foreign design agencies. We have set up an R and D cell to develop in-house capability in offshore platforms, design and related fields. The cell is presently developing computer programmes, including finite element programmes and static analysis of jackets and will eventually do dynamic and fatigue analysis. Programmes are being developed for analysis of loadout, launching and upending operations.

An Ocean Engineering Centre has been set up in the Indian Institute of Technology, Madras, by the Government of to carry out the research and development in this field and Mazagon Dock is actively interacting with the Centre. Our R and D efforts also cover underwater welding.

Pressure vessels

Mazagon Dock entered in the field of pressure vessel fabrication with the construction (in record time) of two large pressure vessels of 85 tonnes for feed gas dryers for the ONGC-LPG plant at Uran near Bombay. This job was done on a short notice on the request of ONGC, as the delivery of the items which was in hand with a reputed pressure vessel fabricator could not be met. Thus, in a big way, Mazagon Dock made an entry into the pressure vessel fabrication.

Future challenges

Presently, the commercial production of oil is concentrated in the continental shelf in the west coast of India off Bombay, where water depth is of the order of 70 to 90 metres. The ONGC is now exploring the possibilities of oil and gas production in a number of locations in the east coast of India and Andaman and Nicobar Islands. The oil here would have to be extracted from the continental slopes in water depths of 200 metres and above, which involves a totally different deep-water technology. This may involve tension leg platforms, articulated towers or semi-submersibles. The area is also prone to extreme cyclonic weather. This poses a new challenge which will be met in the course of time.

Technology transfer

India is a developing country with a vast pool of skilled technical and managerial manpower. Entry into areas of new technology hence inevitably will need the assistance of more experienced and specialised organisations. Offshore technology is a new and exciting field which charts virgin territories. We are fully aware that total self-sufficiency in this area is a myth. In any technology transfer selection, a stage comes when certain specialised areas have to be imported taking into account economies of large scale production and investments involved. Close economic and technical cooperation between the developed and developing nations in these field will immensely benefit both.

We in Mazagon Dock are gearing ourselves to meet the challenges of tomorrow.

Drilling equipment for oil exploration

Concluded from page 25

The specific requirements of the customer are taken care of in each rig. Thus, the rig as a whole does not have one standard specifications. Even for the same drilling depth, sub-assemblies of a rig may vary. The components supplied by BHEL on one rig are properly matched and the total rig is supplied as a well co-ordinated system.

BHEL has already supplied six diesel electric drilling rigs to the Oil and Natural Gas Commission and one to Oil India Limited. Some of the rigs supplied to ONGC have already worked in field for more than three years. These rigs have proved their reliability during critical drilling operation and have withstood extreme climatic conditions.

In BHEL, we consider that our efforts and contribution to the country's requirement of equipment for drilling industry is only in its infancy. With the rich experience gained in the field of oil exploration, we look forward to an even greater participation in the national and international market.

BHEL rig locator

Rig type	Nominal drilling depth rating with 4½" drill pipe	Customer	Rig location
E-2000 I	600 metres	ONGC	Narsapur, A.P.
E-2000 II	6000 metres	ONGC	Sibsagar, Assam
E-2000 III	6000 metres	ONGC	Rajole, A.P.
E-2000 IV	6000 metres	ONGC	Calcutta, W. Bengal
E-760 I	3500 metres	ONGC	Ahmedabad, Gujarat
E-760 II	3500 metres	ONGC	Sibsagar, Assam
E-1400 I	4900 metres	OIL	Duliajan, Assam

ONGC builds new supply base

By V. GOPAKUMAR

THE Oil and Natural Gas Commission is building a new and modern supply base on Nhava Island across the Bombay harbour. There has been stiff opposition from environmentalists who wanted the Nhava Island to be preserved as a green belt. Though on the face of it the environmentalists' concern sounded genuine, the real reason for their concern was that the Royal Bombay Yacht Club members would be deprived of excellent yachting facilities.

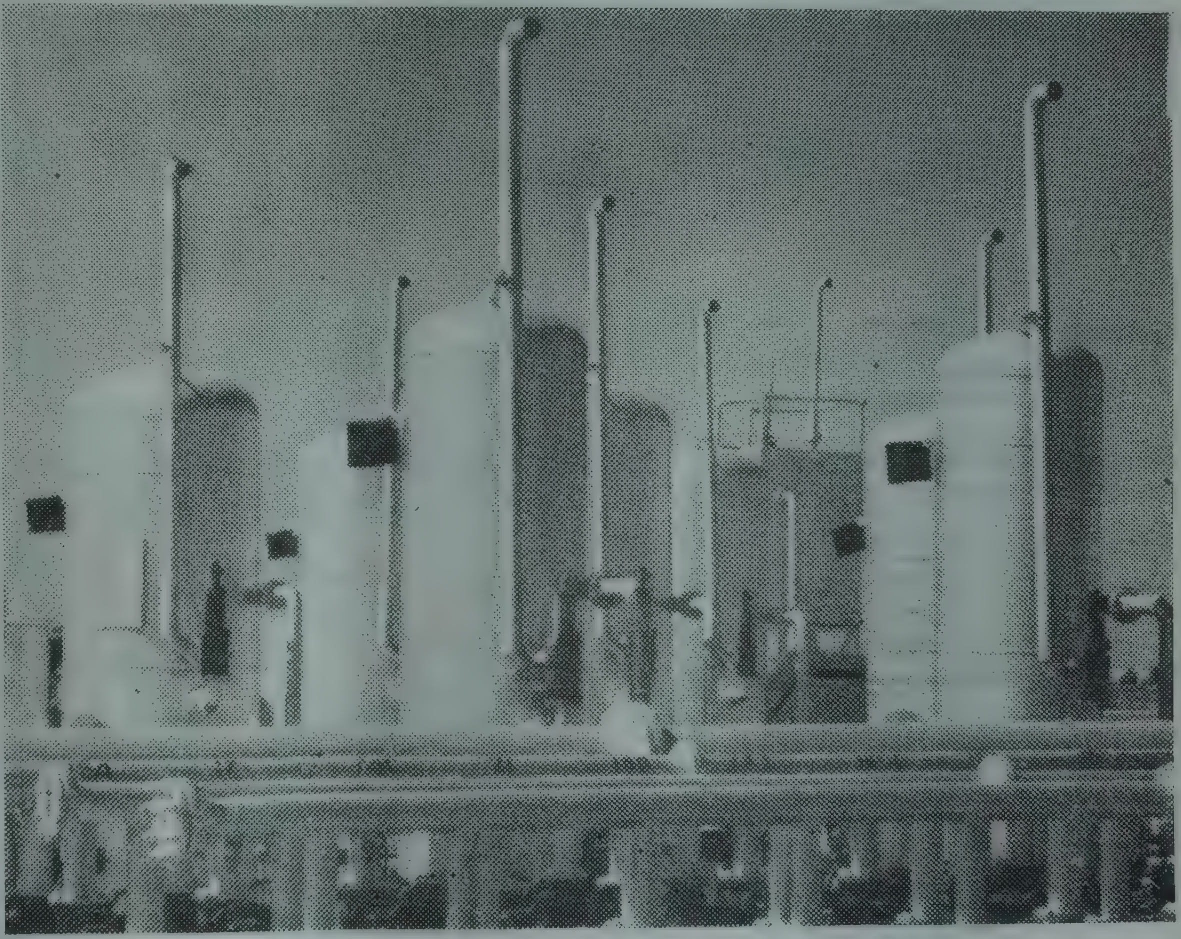
At present the ONGC has a supply base of sorts which has only bare minimum facilities. The ONGC has on lease from the Bombay Port Trust two berths which have a quay length of about 700' at 12 Victoria Docks. The ONGC acquired this facility in 1972 when it had only one rig — *Sagar Samrat* — and two supply boats. The number of rigs and supply boats have gone up and quantity of supplies has also increased several fold. On top of this, there are other problems like shortage of space for storing consumables and only two boats can berth at the same time. Apart from this, supply boats cannot come alongside during low tide for as many as ten hours a day.

The ONGC does not have space to keep supplies near the base and all the godowns are scattered all over Bombay. With Bombay's traffic problems and restrictions on heavy duty vehicle movement allowed only at night, getting supplies from godowns to the supply base itself has been a problem. Considering the increased needs and future requirement the ONGC decided in 1975 to build a new supply base. Nhava Island was selected because it is close to the Bombay High exploration zone and water depth during low tide enough for boats to come alongside.

Nhava Island is about two sq km in size. The ONGC has 50 hectares which is nearly one fourth of the island on lease from the Maharashtra Government. Adjacent to the supply base Mazagon Dock is getting up a new facility for fabrication of platforms for the ONGC.

In June 1976, the ONGC commissioned Peter Fraenkel & Partners as consultants to prepare a master plan for the development of Nhava base. Peter Fraenkel submitted its feasibility study and master plan in January 1977.

The ONGC would be operating about 40 supply boats and about 2 million tonnes of materials would be handled during the working seasons — September to May.



Group gathering stations.

Peter Fraenkel while designing the wharf has taken into consideration ONGC's plan for eight-rig operation and recommended five-berth capacity.

The supply base quay position and alignment have been selected to provide adequate water depth (about 24 feet) to ensure ease of berthing and to minimise maintenance dredging for supply boats drawing up to 5.5 metres. Passage is possible at low water for most supply boats on most tides and at high water for all boats on all tides. Apart from supply boats, there will be a number of vessels which may need to berth alongside for short periods, like seismic survey vessel, fire fighting boat, combination barge, general purpose boat, crew boat, water barge and drilling rigs (at high water only). Mobile diesel powered cranes of 100, 50 and 30 tonnes capacity, fork lift trucks and pipe carrying vehicles would be frequently plying on the wharf. Taking into consideration ONGC's warehousing needs, the consultant has provided part of the warehouse complex adjacent to the wharf and these warehouses will store spare parts, production equipment, bagged cement and chemicals. About 15,000 sq metres of covered space has been planned adjacent to the wharf. In addition, open storage area of eight hectares has been planned adjacent to the quay for stacking of well casing, drill rods and miscellaneous exploration and production equipment and another 10-18 hectares for storage of bare and concrete coated submarine pipes and one hectare for storage of chains, anchors, buoys etc. Diesel fuel storage and water storage for two weeks operation has been planned by providing tankers close to the base. Pipes would pass through ducts in the deck to valve pits and the quay face where flexible hose connections will be made for loading on to the supply boat. Fifty tonnes silos for pre-loading, storage of cement and drilling mud have been planned at each berth and loading of these materials on to the supply boats from the silos is by means of compressed air and will feed through pipes in ducts in the wharf to take-off points at the quay face.

Mazagon Docks new facility at Nhava will be able to fabricate and launch offshore jackets and platforms of 6,000 to 12,000 tonnes of steel/year. It also will have capacity to build six modules of 3,000 tonnes/year. Other facilities

Reg. No. MH-BY/South-38
Licence No. 51
Reg. No. WB/CC-245

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ONGC

on 25 years
of achievement

Thanks to the relentless efforts of ONGC, India finds its place on the oil map of the world.

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DODSAL looks forward to a continuing association with and service to ONGC.

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ADPLAN

at the Nhava base include 6,000 sq meter workshop, office building and offices and warehouses for equipment suppliers.

The detailed designs and preparation of tender documents for the marine works at Nhava were also carried out by Peter Fraenkel and Partners. The contract for construction was awarded to Essar Construction in March 1980.

The first caisson for the wharf was launched in November 1980, the second one in February 1981 and the third one is being launched. Each caisson is 34 x 17 meters and 55 meters high, weighing 3,000 tonnes. On completion the caisson will weigh 8,000 tonnes and when filled with granular material in position will be 18,000 tonnes.

The supply base will have an area of 52 hectares onland and 23 hectares reclaimed from sea. The first two berths will be available for operation by August 1982. The remaining three berths for the supply base, loadout quay, warehouses, dock buildings etc will be completed by March 1983.

Processing of Bombay High crude

Concluded from page 23

LPG bottling plant, tankwagon/tanklorry loading gantries and a pumphouse.

Pollution

Processing of Bombay High crude has provided the refinery with an excellent means of reducing pollution on account of low emission of sulphur dioxide. The refinery has taken particular care to use this low sulphur content residue from this crude as fuel in the refinery with the result that emission of sulphur dioxide from the refinery at present is about 22 tonnes/day as against 49 tonnes/day when the refinery was processing ME crude. However, with the addition of the new catcracker the emission would increase to 42 tonnes/day, but the refinery is implementing a major project for the recovery of sulphur such that the emission of sulphur dioxide would be brought down to 14 tonnes/day.

The modifications effected in the BPC refinery for the processing of Bombay High crude and the additional facilities provided, have been designed and built by the refinery personnel. They are naturally proud of this and look forward to implementing major projects now under way, which are designed to yield the maximum of desirable products from this crude in the national interest.

EASTERN INDIA TODAY

Lags in disbursement

By P. C. MAHANTI

CALCUTTA

THAT the eastern region has not been getting a fair deal from the public financial institutions is wellknown. What is perhaps not so wellknown is that disbursements do not match even the inadequate amounts being sanctioned. Indeed the gap between the two is noticeably large. Take the 1979-80 figures for instance. During this year the Industrial Development Bank of India sanctioned term loans totalling Rs 137 crores but disbursements came to only Rs 78.48 crores or less than 60 per cent of the total. The Industrial Credit and Investment Corporation of India sanctioned Rs 19.55 crores but disbursed only Rs 16.93 crores while the Industrial Financial Corporation disbursed Rs 10.82 crores out of a total sanction of Rs 12.11 crores. The pattern of disbursements and sanctions has been more or less the same over three previous years. The amounts of loans sanctioned has admittedly increased from year to year but the gap between the figures has persisted.

The gap lends substance to the complaint that the terms of the loans are unnecessarily rigid or they are too tight. First of all the current debt equity ratio although already raised to 2:1 from 1:1, is still considered restrictive by industry. Also insistence on a high rate of promoters' contribution in respect of loans for new companies creates difficulties for entrepreneurs. Interests of term loans are often unreasonably high, well in excess of 14 per cent. Conversion clause should be completely removed or alternatively the limit of 40 per cent in the total share capital suggested by the Union Finance Minister for the exercise of the conversion option by term lending financial institutions should include loans from all institutions and not a particular one which wishes to exercise the option. The soft loan scheme is not pragmatic enough to be popular with entrepreneurs.

These complaints could come from industrialists in any part of the country, north, south or west but from the eastern India point of view the proportion of loans sanctioned and disbursed has been steadily declining in relation to the national total. For example in 1976-77 the percentage of loans sanctioned for the eastern states (and these comprised not only Bihar, Orissa, Assam and West Bengal but Sikkim, Manipur, Meghalaya, Nagaland, Tripura and other union territories which constitute the northeast region) was 15.9 of the national total as far as the Industrial Development Bank was concerned; of the total ICICI loans the percentage was only 12.4 and of the IFCI loans the share was 10.1. Three years later the percentages declined to 11.2 for Industrial Development Bank loans, 9.2 for ICICI loans and 8.7 for IFCI loans.

Sick small units

West Bengal's Minister for Small Scale Industries, Mr Chittabrata Majumdar, had his point when he disputed the Central Industries Minister's observation that West Bengal had more sick small scale units than any other state in India on the ground that the latter had not seen the matter in its proper perspective and was therefore creating an entirely wrong impression about the state of small industries in the State. The Central Minister had stated in Parliament that West Bengal had 6,944 sick small units as against 2,763 in Maharashtra, 1,039 in Karnataka, 955 in Tamil Nadu and 856 in Gujarat. The West Bengal Minister would have liked Dr Chanana to give figures about the total number of small scale units in the above states and the circumstances under which they operated.

If West Bengal had the highest number of sick small units its number of small units also was the highest of any state in the country. He claimed West Bengal had 71,116 such units against 28,256 in Maharashtra, 15,627 in Karnataka and 24,189 in Gujarat. Thus only 9.77 per cent of the units in West Bengal were sick whereas the percentage in Maharashtra was higher —9.78. It is also worth noting that, between 1977 and 1979, 14,589 new small industries were set up in West Bengal as against only 3,225 in Maharashtra, 8,440 in Punjab, 6,616 in Gujarat and 4,577 in Karnataka.

The pity of it is that, despite this quick rate of growth in the small scale sector, the share in the allocation of pig iron and steel of which West Bengal is a major producer has been progressively diminishing. Most of the small units in West Bengal are engineering units which need pig iron and steel as their basic raw material. In the total allocation of pig iron in the country West Bengal just received 7.92 per cent in 1980-81 where Punjab, Gujarat and Uttar Pradesh received 25.72 per cent, 20.47 per cent and 14.99 per cent respectively. In absolute terms West Bengal received only 29,089 tonnes of pig iron against a requirement of 300,000 tonnes. In steel where West Bengal's requirement was 250,000 tonnes annually it received in 1980-81 only 36,400 tonnes. Maharashtra, Punjab and even Himachal Pradesh received more than their respective requirements.

In a situation of tight credit restraint the small industries in West Bengal have often to buy their requirements in the open market paying a high premium. In the circumstances if they could not operate economically and gradually get sick, it is the environment rather they which is to blame.

Power crisis

That the power crisis in West Bengal is 90 per cent man-made has been amply demonstrated by the shutdown on Santaldih power station, a major unit in the States' power system today. This superthermal power station had to remain completely shutdown for three days causing unspeakable difficulties for both industrial and domestic consumers, especially the former for whom the West Bengal Government immediately reduced supply. This shutdown was not because of tube leaks or other mechanical breakdowns but because the plant management did not take care to check how long the stock of light diesel will last. When it was detected it was already too late and prompt replacement was out of the question even though arrangements for transport by lorry from Calcutta were ordered. Just a few days ago workers engaged in coal unloading were creating trouble by slowing down their work and often not doing any unloading at all. At least that should have warned the management to check the diesel stock. The local management however, says it informed the higher bosses at the State Electricity Board headquarters in Calcutta a week before the diesel crisis but the latter apparently slept over the matter.

DOCUMENT

Text of new guidelines for bonus share issue

The following is the text of the new guidelines for issue of bonus shares, announced by the Controller of Capital Issues on August 18, 1981:

Under the Capital Issues (Control) Act, 1947, all companies require the prior approval of the Central Government through the Controller of Capital Issues for issue of bonus shares. Government have reviewed the existing guidelines in this regard and have decided to revise them in certain aspects.

The revised guidelines are given below:

1. There should be a provision in the articles of association of the company for capitalisation of reserves etc. If not, the company should produce a resolution passed at the general body making provisions in the articles of association for capitalisation.
2. Consequent to the issue of bonus share, if the subscribed and paid up capital exceeds the authorised capital, a resolution passed at the general body meeting in respect of increase in the authorised capital is necessary.
3. The company should furnish a resolution passed at a general body meeting for bonus issue before an application is made to the Controller of Capital Issues. In the general body resolution, the management's intention regarding the rate of dividend to be declared in the year immediately after the bonus issue should be indicated.
4. The bonus issue is permitted to be made out of free reserves built out of the genuine profits or share premium collected in cash only.
5. Reserves created by revaluation of fixed assets are not permitted to be capitalised.
6. Development rebate reserve/investment allowance reserve is considered as free reserve for the purpose of calculation of residual reserves test.
7. All contingent liabilities disclosed in the audited account which have a bearing on the net profit, shall be taken into account in the calculation of the minimum residual reserves.
8. The residual reserves after the proposed capitalisation should be at least 40 per cent of the increased paid up capital.
9. 30 per cent of the average profits before tax of the company for the previous three years should yield a rate of dividend on the expanded capital base of the company at 10 per cent.
10. Declaration of bonus issue in lieu dividend is not allowed.
11. The company may make a further application for issue of bonus shares only after 36 months from the date of sanction by the government of an earlier bonus issue, if any.
12. Bonus issues are not permitted unless the partly paid shares, if any existing, are made fully paid up.
13. No bonus issue will be permitted if there is sufficient reason to believe that the company has defaulted in respect of the payment of statutory dues of the employees such as contribution of provident fund, gratuity, bonus, etc.
14. Capital reserves appearing in the balance sheets of the companies as a result of revaluation of assets or without accrual of cash resources will neither be allowed to be capitalised nor taken into account in the computation of the residual reserves of 40 per cent for the purpose of bonus issue.
15. At any one time the total amount permitted to be capitalised for issue of bonus shares out of free reserves shall not exceed the total amount of paid up equity capital for the company.
16. Applications for issue of bonus shares should be made within one month of the bonus announcement by the board of directors of the company.
17. In case where there is any default in the payment of any term loans outstanding to any public financial institutions, a no objection letter from that institution in respect of the issue of bonus shares should be furnished by the companies concerned with the bonus issue application.

All applications for bonus issue should be signed by a person not below the rank of direct secretary, together with a certificate from the auditors of the company in the proforma as under shall also be furnished :—

"We have verified the information furnished by the company for issue of bonus shares and find the same as correct. We also certify that we have received all the information required by us for the verification.

We have certify that the proposal contained in the application for the issue of bonus shares meets all the requirements of the bonus issue guidelines, including the guidelines contained in paragraphs 8, 9, 11 and 13 in force issued by the Government in this regard according to the information furnished to us and to the best of our knowledge."

Interest rate dilemma

Concluded from page 374

bearing on the success of its economic strategy. Ministers have already called for settlements well below the current average of ten per cent. Since this would mean a cut in living standards, trade union leaders have responded angrily, but with Britain still at the bottom of the recession their members may not be prepared to price themselves out of jobs.

However, although adult unemployment rose by a further 30,000 in the month to mid-July, and school-leavers pushed up the "headline" figure of total unemployment to 2.85 million, the rate of increase has slowed dramatically during the last three months. The Government has also announced a £700 million package of new job support measures, which should take at least 460,000 people off the unemployment register by the spring of 1983.

Ministers can at least take comfort from the continuing gentle decline in the rate of inflation. In the month of mid-June, the year-on-year increase in the retail prices index edged down to 11.3 per cent and lower inflation remains the cornerstone of the Government's policy.

MONSOON, CROP AND COMMODITY SURVEY: JULY 1981

The continuing menace of floods

By COMMERCE RESEARCH BUREAU

THE progress of the south-west monsoon was satisfactory during July. However, heavy rains caused floods over large parts of the country. At the same time, a few areas were affected as a result of scanty rains. Overall crop position was good and there appeared to be little reason to doubt that the target of 83 million tonnes set for kharif foodgrains would be achieved.

During the period June 1 to July 29, 1981, of the total 35 meteorological sub-divisions rainfall was good (excess or normal) in 31 sub-divisions covering 91 per cent of the population and 89.3 per cent of the net sown area as compared to 32 sub-divisions covering 92 per cent of the population and 95 per cent of the net sown area during the corresponding period last year. Rainfall was deficient in four sub-divisions accounting for nine per cent of the population and 10.7 per cent of the net sown area as compared to three sub-divisions accounting for eight per cent of the population and five per cent of the net sown area in the same period of the preceding year.

Eleven States were affected by floods as a result of widespread and excessive rains. These were Assam, Bihar, Gujarat, Haryana, Jammu & Kashmir, Kerala, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and West Bengal. The States worst affected by floods were Assam, Bihar, Rajasthan and Uttar Pradesh. The floods took a toll of 390 lives. The population affected was over 11 million in 67 districts. About 14,400 villages were hit by the floods and the total loss in terms of crops, property, etc was estimated at Rs 157 crores. The cropped area affected was about 10 lakhs hectares while 4,000 cattle were lost. Fresh floods were reportedly threatening Assam, Bihar and Uttar Pradesh at the end of the month.

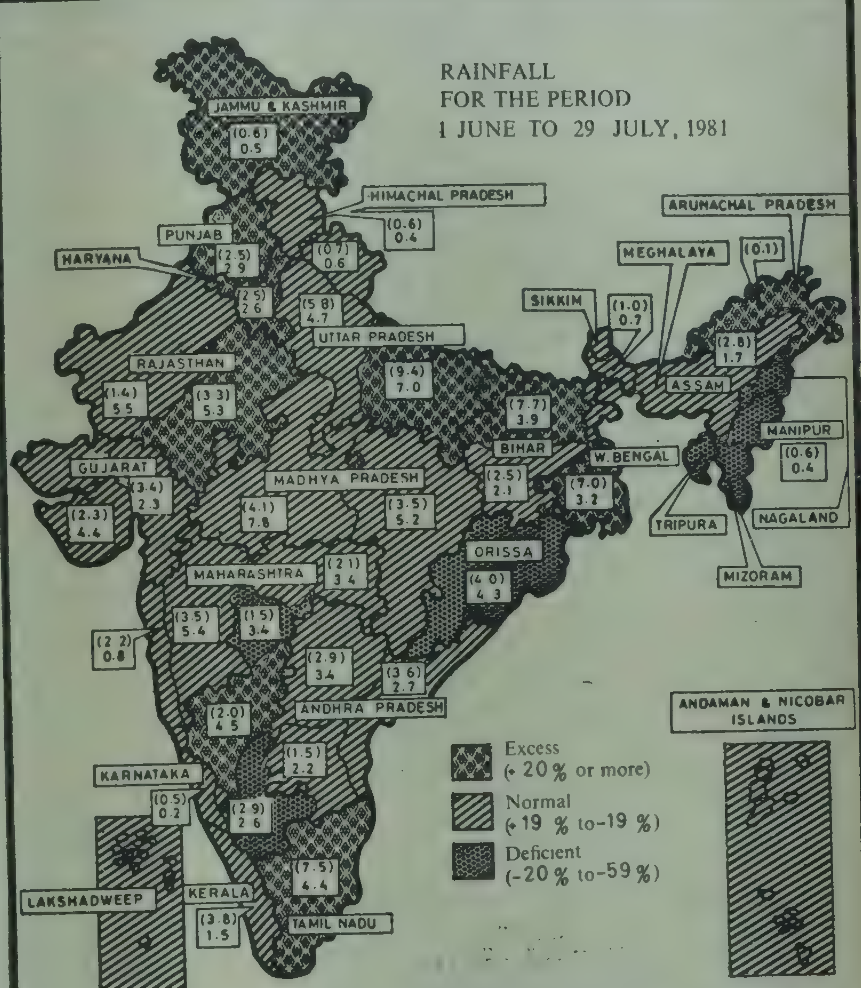
The States affected by drought in certain parts were Karnataka, Maharashtra, Orissa and Tamil Nadu. The Chhatisgarh region of Madhya Pradesh as well as some parts of Haryana also suffered from drought. As a result, crops were badly affected and there was large-scale unemployment of agricultural labourers. Scarcity of driking water was also felt in some parts of the affected regions. Measures for relieving unemployment and drinking water scarcity were undertaken.

The Agricultural Prices Commission (APC) which had recommended the procurement prices of kharif cereals for 1981-82, was directed by the Centre to recommend revised prices taking into account the rise in prices of fertilisers announced in July. The APC has recommended the revised price of Rs 115 per quintal for common variety of paddy against the previously recommended price of Rs 113 per quintal.

The rice procurement during the 1980-81 kharif marketing season was 5.6 million tonnes, about 50 per cent more than last year's 3.7 million tonnes. Wheat procurement in the rabi marketing season was, however, only about 6.4 million tonnes. The foodgrains stocks with the Government as on July 26, 1981 were 13.5 million tonnes comprising of 7.5 million tonnes of wheat and six million tonnes of rice—a million tonnes lower than the stocks of 14.6 million tonnes at the end of July 1980, the composition last year being 8.1 million tonnes of wheat and 6.5 million tonnes of rice. The Government of India decided to import wheat to meet the domestic shortage. As a part of the import programme it contracted for import of 1.5 million tonnes of wheat from the USA. The International Wheat Council, London estimated India's wheat import requirement as four million tonnes for 1981-82.

Progress of Monsoon

RAINFALL
FOR THE PERIOD
1 JUNE TO 29 JULY, 1981



NOTE: The figures in brackets in each square indicate percentage of the total population (1971) and figures outside the brackets indicate the percentage of the total net sown area (1971-72) in the regions.

Commerce Research Bureau

Map not drawn according to scale

Apart from the import of two lakh tonnes of sugar, the Government also decided to import edible oils and cotton to meet domestic requirements. It was proposed to import five lakh tonnes of edible oils through the State Trading Corporation apart from imports on private account. The imports were expected to keep the skyrocketing prices of edible oils in check. As regards cotton, the shortage of short and medium staple cotton faced by the textile industry forced the Government to import one lakh bales of these types from Pakistan. The imports would be canalised through the Cotton Corporation of India. Due to increased production of long and extra-long staple cotton and the comparatively lesser domestic demand, the Government permitted the export of these types including Varalaxmi and Suvin.

The following paragraphs present the Statewise and cropwise position for the month of July 1981.

ANDHRA PRADESH

Up to the end of July the state experienced normal rainfall in two meteorological sub-divisions namely coastal Andhra Pradesh and Telangana while in Rayalaseema it was slightly below normal. The State expected a foodgrains production of 104 lakh tonnes in 1981-82 as against 100 lakh tonnes in the previous season. Rice production was expected to be 69 lakh tonnes.

The Andhra Pradesh State Trading Corporation would export 90,000 tonnes of rice (coarse and fine varieties) to the Soviet Union during the current financial year.

Under a World Bank aided project, seven regional agricultural research stations would be established in the State, one each in the seven agro-climatic zones in the State. The World Bank has allocated a sum of Rs 6 crores under the National Agricultural Research Project of the Indian Council of Agricultural Research (ICAR) over a period of five years. The research stations would be established and operated by the Andhra Pradesh Agricultural University.

The State Government formulated schemes with an outlay of Rs 100 crores to uplift 1.2 lakh scheduled caste families above the poverty line during the year 1981-82. The schemes under the National Rural Employment Programme (NREP) would also form part of the overall programme and would involve an outlay of Rs 16 crores.

ASSAM

The State faced three waves of floods during the monsoon so far. Twentyone persons lost their lives and about 100 head of cattle perished due to the floods which affected seven lakh persons in eight districts and damaged crops over 22,000 hectares. The worst affected districts were Sibsagar, Lakhimpur and Kamrup. The Prime Minister sanctioned Rs 5 lakhs from the National Relief Fund for flood relief in the State.

BIHAR

Floods engulfed 3,000 villages in eleven districts of the State. A population of 32 lakhs was affected by the floods which claimed 15 lives. Crops in an area of 3.66 lakh hectares were damaged. The crop loss was estimated at Rs 9.04 crores. The total loss of crops and property was placed at Rs 64 crores. The Ganga, the Mahananda, the Buri-Gandak, the Kosi and three other rivers were in spate eroding their banks in Katihar, Purnea, Saharsa, East Champaran and Nalanda districts.

As a part of relief operations the State Government set up 410 relief centres, 411 health centres and 265 cattle relief centres. Over 2,871 quintals of foodgrains were distributed as gratuitous relief. The State asked the Centre for an assistance amounting to Rs 25 crores.

It was proposed to set up 100 mini soil testing laboratories in the State during the current financial year to ensure proper application of fertilisers. Fertiliser consumption during 1981-82 was expected to rise to 2.80 lakh tonnes as against 2.05 lakh tonnes in 1980-81.

GUJARAT

Flash floods during the month claimed 50 lives and affected 40,000 people in 116 villages in six districts. As many as 18 dams in the Saurashtra region were reported to be overflowing, thus threatening the neighbouring areas. The total damage was placed at Rs 51 lakhs.

A Rs 120-crore master plan was prepared by the State Government to control floods and also to prevent the erosion of farm lands by flood waters.

The Centre allocated 6,000 tonnes of palmolein for August 1981, 500 tonnes more than the allocation for July. The palmolein would be distributed through fair price shops in August.

The Gujarat State Co-operative Marketing Federation agreed to supply about 6,000 tonnes of groundnut oil to the State Government for distribution among the weaker sections of society through fair price shops during the Janmashtami festival.

HARYANA

The floods caused by heavy downpour in some parts of the State affected 26,000 people in 62 villages and claimed three lives. The loss in terms of crops, property, etc was placed at Rs 10 lakhs.

However, scanty rains in other parts such as Karnal, Kurukshetra and Sirsa were reported to have affected the prospects of kharif paddy crop. The bajra crop was reported to be shaping well and the production was expected to be five lakh tonnes as against 4.84 lakh tonnes in 1980.

The State Government assured adequate power supply to paddy sowing areas in the State.

The State Forest Department planned to develop clusters of eucalyptus groves under the Integrated Rural Development Programme. The groves would be planted free of cost on the lands of marginal farmers owning up to one hectare of land. The Department proposed to plant 400 healthy eucalyptus plants on each farm.

The State lifted the ban on the manufacture of milk products in the State with effect from July 3, 1981.

India's first factory to delint cottonseed with the help of acids would be set up in the co-operative sector at Hisar. The finance and expertise would be provided through the National Seed Development Corporation of the United States.

HIMACHAL PRADESH

Heavy rains and cloudburst were reported to have caused damage to the standing fruit crop worth Rs 16 lakhs in Chamba and Kangra districts.

The Himachal Pradesh Horticulture Produce Marketing and Processing Corporation initiated a programme for marketing of bumper apple and other crops this season. Thirty centres were opened for sale of fresh fruits and a network of packing and grading houses and transhipment centres was set up for collecting, grading and packing of fruits.

JAMMU & KASHMIR

Flash floods caused by the tributaries of the three rivers — Tawi, Chenab and Jhelum — claimed ten lives. About 1,000 houses in the Jammu region were partly or completely damaged. The rain also affected paddy transplantation all over the State.

The Centre agreed to ban the import of hops to promote its cultivation in the State. The area under hops had doubled from 150 hectares in 1980 to 300 hectares in 1981.

KARNATAKA

Owing to scanty rainfall during the month, drought threatened six of the 19 districts of the State. Standing kharif crops were reported to be withering due to lack of soil moisture.

The target for kharif foodgrains production for 1981-82 was placed at 68 lakh tonnes.

The State Government raised the price of milk supplied by the Government dairies by 40 paise per litre with effect from August 1, 1981. The new price of milk would be Rs 2.10 per litre as against the previous price of Rs 1.70 per litre.

KERALA

The State asked the Centre's permission to purchase rice from any part of the country as the Food Corporation of India in its opinion had failed to honour its commitment to meet the State's shortage of rice.

The Centre's decision to import coconut oil led to a steep fall in the price of coconuts and coconut oil in the State. The State-owned Coconut Development Corporation purchased about 2,000 tonnes of copra to ease the situation in the wake of the price fall. The State Government urged the Union Government to stop the import of coconut oil forthwith.

MADHYA PRADESH

The State Government abolished the levy on sale or purchase of wheat by

Progress of the South-west Monsoon during July 1981

State/Region	Population 1971 Census (million)	Net area: 1971-72 million hectares			Kharif crops		Rainfall for the period June 1 to July 29, 1981			Rainfall for the week ending July 1981					
		Sown	Irrigated	Percentage of net irrigated area to net sown area	Food	Cash	Normal (mm)	Actual (mm)	Departure from the normal (Percentage)	Over all position	1st	8th	15th	22nd	29th
Andhra Pradesh ..	..43.50	11.27	3.00	26.6	Rice, jowar, bajra, maize and ragi	Castorseed, groundnut, tobacco, mesta, cotton and chillies									
Coastal	..19.72	3.71	1.88	50.1			243	248	2	N	E	D	N	N	E
Telangana	..15.81	4.63	0.66	14.3			354	377	6	N	E	N	N	N	N
Rayalaseema ..	.. 7.97	2.93	0.48	16.4			159	138	—13	N	E	D	S	S	E
Assam	..14.63	2.24	0.57	25.4	Rice and maize	Jute and tea	813	657	—19	N	N	N	N	N	N
Bihar	..56.35	8.28	2.38	28.7	Rice and maize	Jute, mesta and potato									
Plateau	..14.23	2.90	0.21	7.2			510	498	—2	N	E	N	D	E	D
Plains	..42.12	5.38	2.17	40.3			471	607	29	E	E	E	S	E	N
Gujarat	..31.39	9.32	1.21	13.0	Bajra, jowar, rice and maize	Cotton, tobacco, groundnut and castorseed	412	422	2	N	E	S	E	D	D
Gujarat region ..	..18.47	3.26	0.48	14.7											
Saurashtra and Kutch	..12.92	6.06	0.73	12.0			304	295	—3	N	E	S	E	S	N
Haryana (Including Chandigarh & Delhi)	..14.37	3.67	1.57	42.8	Bajra, maize, rice and jowar	Cotton and sugarcane	215	412	92	E	E	N	E	E	E
Himachal Pradesh ..	.. 3.46	0.55	0.09	16.4	Maize, rice and ragi	Apples, potato and ginger	591	513	—13	N	E	S	N	N	D
Jammu and Kashmir	.. 4.62	0.71	0.26	36.6	Maize and rice	Apples and saffron	164	247	51	E	E	D	E	N	E
Karnataka	..29.30	10.33	1.38	13.4	Ragi, jowar, bajra and rice	Safflower, groundnut, cotton, coffee and sugarcane									
Coastal	.. 2.79	0.31	0.11	35.5			1943	1855	—5	N	N	S	D	S	E
Interior North ..	..10.72	6.30	0.45	7.1			245	325	33	E	N	E	S	S	E
Interior South ..	..15.79	3.72	0.82	22.0			157	102	—35	D	S	S	S	S	E
Kerala	..21.35	2.19	0.44	20.1	Rice, ragi and tapioca	Tea, coconut, coffee, arecanut, rubber and black pepper	1133	1294	14	N	S	D	D	S	E
Madhya Pradesh ..	..41.65	18.46	1.64	8.9	Jowar, maize, rice and bajra	Sesamum, groundnut, cotton and sannhemp	520	468	—10	N	D	N	N	D	N
East	..19.31	7.38	0.75	10.2											
West	..22.34	11.08	0.89	8.0			427	371	—13	N	N	N	D	D	D
Maharashtra	..51.31	16.58	1.34	8.1	Jowar, bajra, ragi and rice	Cotton, safflower, groundnut, chillies and sugarcane									
Konkan and Goa ..	..12.30	1.00	0.04	4.0			1558	1699	—9	N	E	N	D	D	E
Madhya Maharashtra	..19.17	6.96	0.74	10.6			246	285	16	N	N	E	E	D	D
Marathwada ..	.. 8.07	4.31	0.27	6.3			298	223	—25	D	D	N	D	S	E
Vidarbha	..11.77	4.31	0.29	6.7			480	416	—13	N	N	N	E	S	D
Manipur	.. 1.07	0.14	0.07	50.0	Rice	Chillies	—	—	—	—	—	—	—	—	—
Meghalaya	.. 1.01	0.16	0.04	25.0	Rice	Potato, Jute and mesta	—	—	—	—	—	—	—	—	—
Nagaland	.. 0.52	0.06	0.01	16.7	Rice	—	—	—	—	—	—	—	—	—	—
Orissa	..21.95	6.12	1.15	18.8	Rice, ragi and maize	Castorseed, sesamum, jute and mesta	521	372	—29	D	D	D	D	D	D
Punjab	..13.55	4.08	2.96	72.5	Maize, bajra and rice	Cotton, sugarcane, groundnut and potato	195	253	30	E	S	N	E	N	E
Rajasthan	..25.77	15.26	2.17	14.2	Bajra, maize and jowar	Cotton, sesamum and sannhemp	267	369	38	E	E	S	E	E	D
East	..17.93	7.48	1.44	19.3			122	120	—2	N	N	S	E	E	N
West	.. 7.84	7.78	0.73	9.4											
Tamil Nadu (Including Pondicherry) ..	..41.67	6.35	2.71	42.7	Ragi, rice, bajra and jowar	Tea, chillies, groundnut, sesamum, cotton and sugarcane	100	145	45	E	D	S	D	E	E
Tripura	.. 1.56	2.40	0.02	0.83	Rice	Jute, mesta and tea	—	—	—	—	—	—	—	—	—
Uttar Pradesh ..	..88.34	17.32	6.99	40.4	Maize, bajra, rice and jowar	Sesamum, potato and sugarcane	372	455	22	E	E	E	N	E	E
East	..51.97	9.87	3.70	37.5			342	363	6	N	E	N	D	N	N
West (Plains) ..	..32.55	6.58	3.15	47.9			647	638	—1	N	N	D	N	N	N
West (Hills)	.. 3.82	0.87	0.14	16.1											
West Bengal	..44.33	5.71	1.49	26.1	Rice	Jute, mesta, tea and potato	1201	1049	—13	N	E	E	D	E	E
Sub-Himalayan and Sikkim	.. 5.57	0.97	0.12	12.4			504	823	63	E	N	E	E	E	D
Gangetic	..38.76	4.74	1.37	28.9											

NOTES: E = Excess, i.e. + 20 per cent or more N = Normal, i.e. + 19 per cent to — 19 per cent D = Deficient, i.e. — 20 per cent to — 59 per cent S = Scanty, i.e.—60 per cent or less

Figures of rainfall for Assam include also those for Meghalaya

traders within the State. The levy on wheat for sale outside the State would however remain in force.

Both floods and drought affected the State during the month. While the Narmada inundated areas around Nemawar in Dewas district, drought loomed large over the Chhattisgarh region—the rice bowl of the State. The condition of the standing paddy crop was reported to be critical. Agricultural operations were incomplete in Raipur, Durg, Rajnandgaon and Bastar districts.

The State Government proposed to introduce group insurance scheme for major crops in 20 selected tehsils in 12 different agro-climatic zones on an experimental basis. The farmers would be insured up to Rs 2,000 if they secured credit from banks for farm inputs. Premium would vary from five to ten per cent of the average value of crops.

Under the kharif campaign initiated by the State Agriculture Department 12,500 quintals of seeds were distributed together with fertilisers. An additional area of eight lakh hectares would be brought under kharif crops in 1981-82.

Increase in soyabean production was a significant part of the kharif programme of the State for 1981-82. Soyabean output, which was 3.5 lakh tonnes last year, was estimated to go up to seven lakh tonnes this year.

MAHARASHTRA

While most parts of the State received normal rainfall, the Marathwada region and Ahmednagar and Solapur districts suffered due to scanty rainfall. Scarcity of drinking water was being experienced in 643 villages of the Marathwada region and 100 villages of Shrirampur taluka in Ahmednagar district. The availability of water in 156 minor irrigation and 24 medium tanks in Marathwada region was below 25 per cent while the kharif crops in six lakh hectares were affected. Sowing and transplanting operations were in full swing in the rest of the State.

The kharif foodgrains output was targeted at 68.7 lakh tonnes for 1981-82, mainly comprising 23 lakh tonnes of rice and 34 lakh tonnes of jowar.

A committee headed by the Chief Minister would be set up to review the rainfall and crop position in all districts of the State and take appropriate measures.

The State Government decided to set up a corporation to develop horticultural estates in the State. The total capital requirement of the corporation would be Rs 15 crores to Rs 20 crores of which the State Government's contribution would be Rs 5 crores. The balance would be contributed by the co-operative and nationalised banks and Agricultural Refinance and Development Corporation.

With a view to extending various facilities and concessions, the State Government widened the scope of the definition of small and marginal farmers which would benefit 15 lakh farmers in non-irrigated areas. The ceiling for small farmers was extended up to six hectares and/or those farmers paying an annual cess of Rs 15.

Milk consumers under the Government milk scheme in Greater Bombay would pay Rs 5 per litre for whole milk from August 1, 1981 as against the previous price of Rs 4.30 per litre. The price of standard milk was raised by 40 paise to Rs 3.30 per litre. Corresponding price rises were also announced for other areas served by the Government milk schemes. The rise was necessitated by the State Government's decision to pay the milk producers additional 20 paise for cow milk and 40 paise for buffalo milk per litre from that date.

The Centre agreed in principle to allow the State Government to continue for one more year the monopoly cotton procurement scheme provided it did not ask for funds from the Reserve Bank of India and that it gave more benefits to the cotton cultivators. The Centre also wanted the Cotton Corporation of India to be given a role to play in the operation of the scheme. It may be recalled that the period of operation of the scheme had expired on June 30, 1981 and the State Government had requested the Centre for its sanction to continue the scheme for ten years.

MANIPUR

The State Government earmarked a sum of Rs 1 crore during the current financial year for giving incentives to growers of pineapples, oranges and lime. In May 1981, the Manipur Fruit Processing and Cold Storage Co-operative Society Ltd despatched 30,000 tins of canned pineapples worth Rs 1.90 lakhs to Kuwait.

The Reserve Bank of India, in consultation with the Centre and the State Government constituted a study team to suggest measures to improve the working of agricultural credit institutions in the State.

ORISSA

Drought gripped seven districts — Bolangir, Sambalpur, Kalahandi, Sundargarh, Koraput, Dhenkanal and Ganjam— in the State. Agricultural operations in these districts had come to a standstill.

The State sought an additional allotment of 30,000 tonnes of foodgrains from the Centre for implementing the National Rural Employment Programme. The State allotted 10,000 tonnes of rice from its own stocks for the programme.

According to the Chief Minister of the State the foodgrains production during 1980-81 reached an all-time high of 60.47 lakh tonnes.

The State's target for kharif cereals production for 1981-82 was fixed at 48.5 lakh tonnes and that for pulses at 1.60 lakh tonnes.

PUNJAB

The weak monsoon up to July 20 led agricultural experts to fear that the higher targets set for kharif production in 1981-82 may not be achieved except for cotton. Late sowing of paddy was expected to affect the yield. The target for paddy production was fixed at 34 lakh tonnes as against 32 lakh tonnes last year.

Widespread rains lashed the State during the second fortnight of the month causing flash floods in 200 villages, killing four persons, affecting a population of 0.5 lakh and a cropped area of 0.47 lakh hectares. The total loss was put at rupees one crore.

The Cotton Corporation of India (CCI) would purchase 3.5 lakh bales of cotton in Punjab in the coming cotton season as against 2.75 lakh bales purchased last year.

The Punjab Cooperative Supply and Marketing Federation would construct 200 godowns of 10,000 tonnes capacity each at 42 different places in the State.

Stress was being laid by the State Government on the production of pulses in the State. With a view to increasing the production of pulses in the State, 64,000 hectares would be used for the cultivation of pulses during the current kharif season as against 54,000 hectares last year. The production target for kharif was placed at 42,000 tonnes as against 35,000 tonnes last year.

The State Government appointed a three-member panel under the chairmanship of the Milk Commissioner to review the milk prices in the State every four months. The State Government announced an increase of 25 paise per litre in the purchase price of milk by the Punjab Dairy Development Corporation with effect from July 1, 1981.

The State Government decided to set up a commercial afforestation corporation for curative afforestation for the water-logged areas and also to promote commercial forests in government and private land to supply raw material to the proposed paper mills to be set up in the State. The proposed corporation, in co-ordination with the Punjab Forest Department, would develop a perennial forest cycle so as to avoid ecological imbalances as well as soil problems.

RAJASTHAN

Widespread heavy rains after three years of drought resulted in severe floods. Standing crops in four lakh hectares were destroyed out of the total affected area of eight lakh hectares. While 150 to 200 persons lost their lives, a population of seven lakhs in 8,914 villages of eleven districts of the State was affected by floods.

The State Government sought Rs 100 crores Central assistance for flood relief in the State and submitted a preliminary report to the Union Government on the damage caused to life and property by recent heavy rains and floods in the State. The three-member Central team which made an aerial survey of the flood-affected areas of the State recommended to the Union Government an immediate sanction of an "interim assistance" of Rs 10 crores for relief. The team also recommended allotment of 50,000 tonnes of cement and 4,00,000 galvanised sheets for providing temporary shelters to the flood victims.

The grain-producing areas of north-eastern Rajasthan comprising Bharatpur, Sawai Madhopur, Tonk and Jaipur districts had been turned into deep ravines by the recent floods.

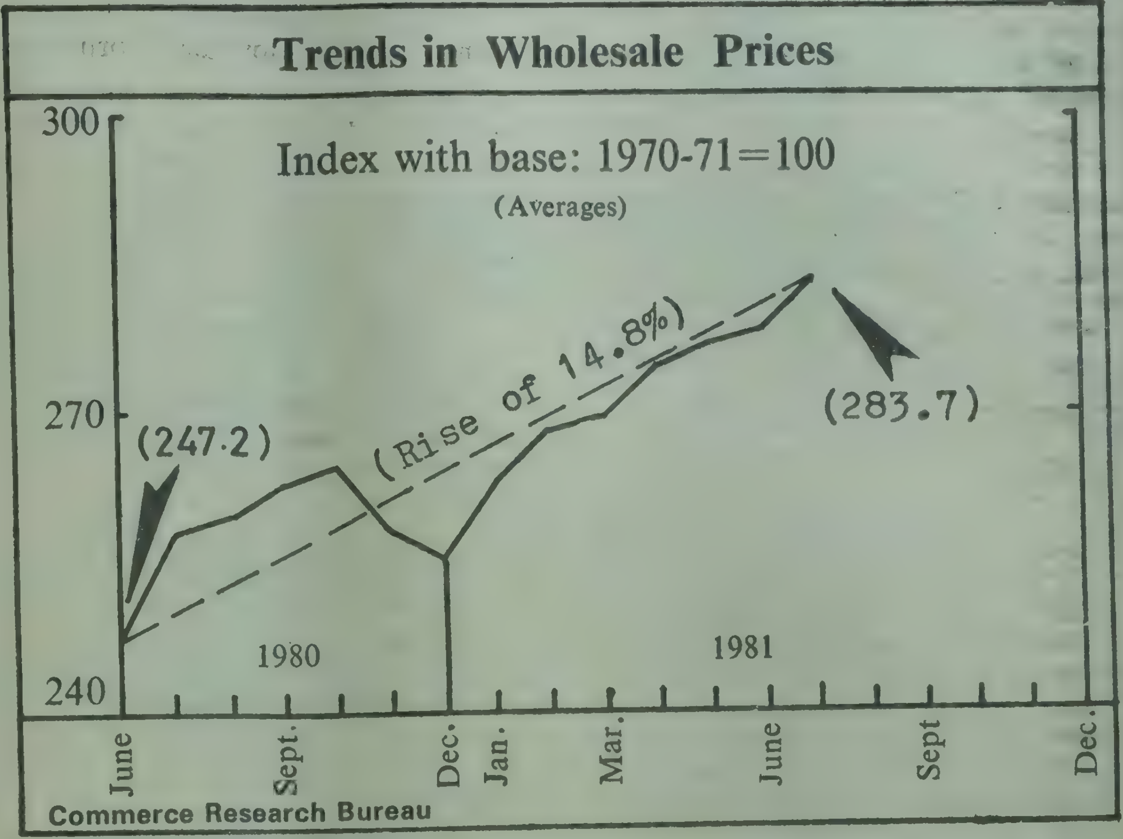
More emphasis was being laid on cash crops in the State during the current kharif season compared to foodgrains. According to a programme drawn up by the Agriculture Department, though the overall cropped area would be at the same level as in the year 1980, the area under foodcrops would be reduced by six lakh hectares to 83.40 lakh hectares.

TAMIL NADU

The lack of rains in the initial stages of the monsoon delayed the sowing of *Kuruvai* (kharif) paddy in the State by about a month. The sowing of groundnut, grown over an area of 8.8 lakh hectares, was also delayed. These factors made the outlook for kharif crops grim. Meanwhile, drought conditions persisted in some parts of the State. The State Government arranged to distribute seeds at subsidised rates to small and marginal farmers in the drought-hit areas.

The State Government spent Rs 22 crores out of Rs 33 crores allotted for drought relief work in the State up to July 4, 1981. Land development banks in the State were permitted to reschedule the overdues amounting to Rs 93 crores as on June 30, 1980, of farmers who had been affected by natural calamities during the period 1974-78.

The Tamil Nadu Civil Supplies Corporation reduced the issue price of open market sugar to Rs 675 per quintal from



PRICES IN JULY 1981

Rise in prices unabated

AT 283.7 the average wholesale price index for July 1981 was 1.9 per cent higher than in June 1981. During the first four months (April-July) of 1981-82 the wholesale price index was higher by 13.6 per cent over that in the corresponding period of 1980-81.

The steep rise in the wholesale price index during July 1981 was partly attributed to the increase in prices of petroleum and its products, fertilisers and cement and partly due to the rise in the prices of food articles such as rice, jowar, bajra, ragi, gram, arhar, condiments and spices, butter and ghee, and eggs.

Month	Wholesale price Index (Average) (1970-71=100)	Percentage change
1980		
June	247.2	+3.0
July	257.8	+4.3
August	259.8	+0.8
September	262.9	+1.2
October	264.6	+0.6
November	258.4	—2.3
December	255.3	—1.2
1981		
January	262.6	+2.9
February	268.1	+2.1
March	269.5	+0.5
April	274.6	+1.9
May	276.8	+0.8
June	278.3	+0.5
July	283.7	+1.9

Index number of wholesale prices (Base: 1970-71=100)

Group	Weight in the official index	July 25, 1981	June 27, 1981	July 26, 1980	Percentage variation on July 25, 1981 over June 27, 1981	Percentage variation on July 25, 1981 over July 26, 1980
Manufactured products	49.9	274.1	274.9	265.2	–0.3	3.4
Food products	13.3	324.2	335.8	341.0	–3.5	–4.9
Textiles	11.0	222.9	220.2	211.9	1.2	5.2
Rubber & rubber products ..	1.2	274.7	270.8	243.5	1.4	12.8
Chemicals & chemical products	5.5	257.1	252.5	245.5	1.8	4.7
Non-metallic mineral products	1.4	302.7	289.5	276.1	4.6	9.6
Machinery & transport equipment ..	6.7	259.4	256.0	236.7	1.3	9.6
Primary articles ..	41.7	270.5	259.4	235.2	4.3	15.0
Food articles ..	29.8	241.5	228.0	207.3	5.9	16.5
Non-food articles ..	10.6	245.6	240.1	214.0	2.3	14.8
Fuel, power, light & lubricants	8.4	428.7	400.5	355.1	7.0	20.7
All commodities ..	100.0	285.7	279.1	260.3	2.4	9.8

the existing price of Rs 725 per quintal with effect from July 1, 1981. The open market sugar is released by the Corporation to all bulk consumers and to the public for social and religious functions.

The tea plantation industry in the State was reported to be passing through a crisis as a result of an overall increase in costs accompanied by persistent fall in the prices. Unless remedial measures were undertaken immediately, nearly 60 per cent of the tea estates in the State would be in the 'red', throwing several thousand workers out of employment.

TRIPURA

The State Government decided to establish a corporation with an estimated capital investment of Rs 5 crores solely with the purpose of settling permanently the tribal *jhumias* (shifting cultivators) in rubber plantation. The *jhumia* settlement scheme would be labour-intensive and the proposed corporation was likely to spend Rs 10,000 for each *jhumia* family over a period of eight years. Each family would be allotted two hectares of land to grow and nurse rubber trees under the corporation's supervision.

The Indian Dairy Development Corporation approved a Rs 56-lakh project for integrated dairy development in the State. Under the project, a total of 80 milk co-operative units would be formed under a central dairy organisation to increase production and distribution of milk throughout the State by directly involving over 16,000 milk producers.

UTTAR PRADESH

Nearly half of the State was hit by floods as a result of heavy and continuous rain all over the State bringing misery to more than 70 lakh people, killing 187 persons, affecting about 8,875 villages in 31 districts and destroying a cropped area of four lakh hectares. A high-level committee was constituted under the chairmanship of the Chief Secretary to the State Government to supervise relief measures and keep constant vigil on the flood situation.

The State was expecting a record kharif harvest during 1981-82 as a result of bountiful monsoon and elaborate crop planning. The kharif foodgrains production target for 1981-82 was placed at 10 million tonnes as against an achievement of 9.1 million tonnes last year.

Under the social forestry scheme, afforestation in an area of 10,000 hectares would be completed in 42 districts in the State during the current rainy season.

WEST BENGAL

Heavy rains and floods in Midnapore district during the first fortnight of July resulted the death of four persons and damage to the *aman* crop. The overall crop position in the State was, however, normal and the State expected to harvest a normal kharif crop.

The State required 2.5 lakh tonnes of fertilisers including nitrogen and potash for rabi cultivation. The Centre had agreed to meet the demand fully. The distribution of fertilisers for the rabi season would begin from August 1, 1981 and would continue till January 31, 1982.

A task force on oilseeds was set up by the State Government to monitor the programme for larger cultivation of mustard and other varieties of edible oilseeds. The West Bengal Agro-Industries Corporation had taken up a rice bran oil project to meet the deficit in the supply of edible oil in the State. Initially a Rs 4.5-crore oil extraction unit would be set up.

The Jute Commissioner announced the statutory minimum prices of different grades and varieties of raw jute for purchase and sale in Calcutta during the season ending June 1982, for both ready and forward delivery under the Jute (Licensing and Control) Order, 1961. Accordingly the per quintal price of ex-Assam W-5 grade in Calcutta was raised to Rs 240 as against Rs 217.50 last year. The higher grades of raw jute for ready delivery at Calcutta were priced at W-1 — Rs 300, W-2 — Rs 285, W-3 — Rs 270 and W-4 — Rs 255 per quintal with a difference of Rs 15 per quintal in each grade. The difference for the lower grades at each level was, however, kept at Rs 10 per quintal. An interest at the rate of 19.5 per cent per annum would be added to the minimum prices whenever the payment for the prices of the goods was made beyond 11 days.

The World Bank agreed to give an assistance to the State Government for establishing 45 cold storage plants. The assistance would be routed through the Agricultural Refinance and Development Corporation.

Rice

Procurement of rice during the 1980-81 kharif marketing season (November 1980 — October 1981) totalled 56.4 lakh tonnes until July 30, 1981 as against 37.7 lakh tonnes during the corresponding period of last year. Punjab contributed 25.2 lakh tonnes, Haryana 6.7 lakh tonnes, Andhra Pradesh 6.5 lakh tonnes, Uttar Pradesh 5.8 lakh tonnes, Madhya Pradesh 3.7 lakh tonnes, Tamil Nadu 1.7 lakh tonnes, West Bengal 1.3 lakh tonnes and the other States 5.5 lakh tonnes.

The Agricultural Prices Commission (APC) recommended the revised procurement price for common variety of paddy of Rs 115 per quintal for the 1981-82 kharif marketing season in the wake of the increase in the prices of urea and other fertilisers. The APC had earlier recommended Rs 113 per quintal.

In the Tiguddem market the price of rice (fine) declined by 2.8 per cent over the month to Rs 297.30 — 304.05 per quintal.

Wheat

India contracted for the import of 1.5 million tonnes of wheat from the United States at a total cost of Rs 259 crores. The landed cost of wheat worked out to Rs 160-165 per quintal and including insurance and storage charges it worked out to Rs 172.4 per quintal. The procurement of wheat during the current rabi marketing season (April 1981- March 1982) amounted to 6.4 million tonnes as on July 26, 1981 as against the target of 9.5 million tonnes. The shortfall in procurement was attributed to lower actual production than estimated in Punjab and Haryana of the order of 1.7 million tonnes.

The price of wheat (farm) in the Bhatinda market increased by 6.4 per cent over the month to Rs 143-155 per quintal.

Jute

In line with the recommendation of the task force on jute textiles that an inbuilt incentive in the price structure be provided to encourage growers to produce high quality jute, the Jute Commissioner increased the price differential between superior grades of jute for the 1981-82 season by Rs 15 per quintal for upcountry markets of the jute growing States. The differential ranged from Rs 10 to Rs 13.50 for the previous season.

Jute mills located in and around Calcutta would have to pay Rs 240 per quintal for W-5 grade during the 1981-82 jute season as against Rs 217.50 per quintal last season.

It was further stipulated that the Calcutta delivery prices would be applicable to contracts which provided for payment immediately or within 11 days of the beginning of the contract. Payments made beyond this time schedule would atttract interest at the rate of 19.5 per cent per annum.

The Soviet Union agreed to amend their purchase contracts so as to make 100 per cent payment of invoice value against shipment of jute goods from the country. Previously 97 per cent of the invoice value was paid, the balance three per cent being retained for adjustment against claims.

The price of jute (W-5) in the Calcutta market showed a rise of 10.3 per cent over the month to Rs 240 per quintal.

Cotton

The Union Government decided to allow the export of 55,000 bales of long and extra long staple cotton through the

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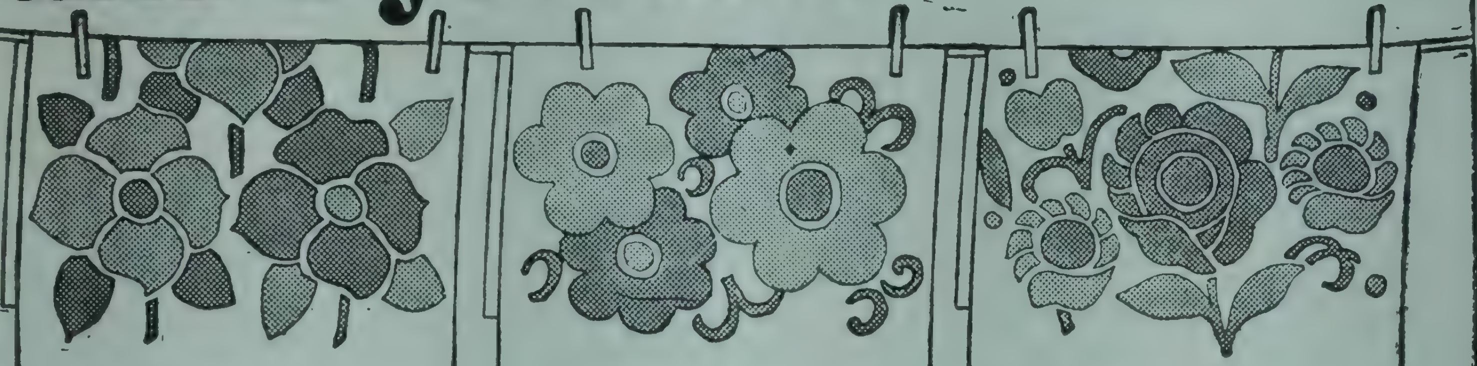

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- Methyl Violet 2B

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INTERMEDIATES

- N, N-Dimethylaniline
- Diethyl meta amino phenol
- Resorcinol

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Spot prices of agricultural commodities: July 1981

(Rs per quintal)

Commodity	Market	Variety	July 31, 1981	June 30, 1981	July 31, 1980	July 31, 1979	Percentage variation on July 31, 1981 over a month	a year	two years
I. Foodgrains									
(1) Rice	Delhi	Basmati	400-575	400-550	275 550	325-525	2.6	18.2	14.7
	Hapur	Basmati	480-520	475-520	460-500	355-365	0.5	4.2	38.9
	T'guddem	Fine	297.30-304.05	308.11-310.81	297.30-302.70	—	—2.8	0.2	—
(2) Wheat	Bhatinda	Farm	143-155	137-143	145-155	—	6.4	—0.7	—
	Delhi	Deshi	200-235	190-225	155-175	125-135	4.8	31.8	67.3
	Rohtak	Dara	138-155	130-148	115-125	—	5.4	22.1	—
(3) Barley	Bhatinda	Average	100-110	108-130	110-116	—	11.7	—7.1	—
	Hapur	Average	120-125	118-125	122-127	86-88	0.8	—1.6	40.8
(4) Jowar	Solapur	Average	145-165	145-165	140-155	—	—	5.1	—
	Karnal	Average	148-165	140-175	120-139	—	—0.6	20.8	—
(5) Bajra	Ahmedabad	Average	160-180	160-170	125-150	—	3.0	23.6	—
	Shrirampur	Average	200-220	185-200	145-170	—	9.1	33.3	—
(6) Maize	Hapur	Average	140-148	140-170	130-140	110-120	—7.1	6.7	25.2
	Karnal	Average	150-160	148-160	118-124	—	0.6	28.1	—
(7) Gram	Bombay	Deshi	425	365-470	330-335	238-242	1.8	27.8	77.1
	Hapur	Average	340-380	300-350	290-330	170-210	10.8	16.1	89.5
	Rohtak	Kabli	410-475	410-470	340-415	—	0.6	17.2	—
II. Fibres									
(1) Cotton	Bombay	Varalaxmi (A)	1,926	1,898	1,687	1,743	1.5	14.2	10.5
	Bombay	CJ-73	1,378	1,378	—	—	—	—	—
	Bombay	L-147(A)	1,561	1,561	1,167	1,153	—	33.8	35.4
	Bombay	A-51-9	1,547	1,525	1,167	1,047	1.4	32.6	47.8
	Bombay	Bengal Deshi	1,069	1,040	703	717	2.8	52.1	49.1
(2) Jute	Calcutta	W-5	240	217.50	217.50	230	10.3	10.3	4.3
III. Groundnut and its oil									
(1) Groundnut (Kernels)	Bombay	Karad Bold	637	589	485	414	8.1	31.3	53.9
	Kanpur	Average	750-800	750-830	570	360-415	—1.9	36.0	100.0
	Rajkot	Average	541.67	516.67	379.17	—	4.8	42.9	—
(2) Groundnut oil ..	Bombay	—	1,570.4	1,385	1,080	975	13.4	45.4	61.1
	Madras	—	1,460	1,350	1,050	930	8.1	39.0	57.0
	Rajkot	—	1,472.5	1,332.50	950	930	10.5	55.0	58.3
IV. Others									
(1) Sugar	Bombay	C-30	645-650	669-670	765-770	275-276	—3.3	—15.6	135.0
	Hapur	—	580-620	690-720	695-750	283-286	—14.9	—17.0	110.9
(2) Khandsari	Hapur	Superior	480-540	480-540	480-540	255-265	—	—	96.2
	Delhi	Deshi	640-660	640-660	580-600	265-278	—	10.2	139.4
(3) Gur	Hapur	Dhaia Sup.	282-290	270-285	345	200-208	2.7	—17.4	39.7
(4) Tea	Bombay	Average	2,300	2,300	2,400	2,250	—	—4.2	2.2

Cotton Corporation of India and State Cooperative Marketing Federations. The Maharashtra State Cooperative Marketing Federation was allocated 25,000 bales, Gujarat State Cotton Cooperative Marketing Federation 15,000 bales and the Cotton Corporation of India 15,000 bales.

The Centre agreed in principle to allow the Maharashtra Government to continue its cotton monopoly procurement scheme with certain modifications for a period of one year.

The Cotton Corporation of India (CCI) finalised a deal with Tamil Nadu Textile Corporation for the supply of 10,000 bales of short and medium staple cotton at a concessional rate.

It was decided to import one lakh bales of short and medium staple cotton from Pakistan. The shipments would commence in September.

In the Bombay market the price of cotton (Bengal-deshi fine) rose by 2.8 per cent over the month to Rs 1,069 per quintal.

Edible oils

The Centre raised the effective duty on vegetable oils and allied products imported on private trade account to 150 per cent *ad valorem* on July 25, 1981. Imports by the State Trading Corporation would, however, continue to attract a concessional duty of only five per cent *ad valorem*. The Union Government further included vegetable fats in the list of items whose import was canalised through the State Trading Corporation.

Earlier during the month the Centre had raised on July 18, the import duty on six edible oils having regard to their international and local prices. The import duty on palm oil, rapeseed oil, soyabean oil, sunflower oil and palmolein was raised from 12.5 per cent *ad valorem* to 42.5 per cent *ad valorem* while in the case of coconut oil the duty (basic and auxiliary) was raised from 60 per cent to 80 per cent *ad valorem*.

The State Trading Corporation contracted for the entire quantity of five lakh tonnes of edible oils which the Centre proposed to import during 1981-82.

The Union Civil Supplies Ministry increased the allocation of edible oils to the States by 10 per cent to 51,000 tonnes during August for distribution through fair price shops.

The Union Government allowed the export of peanut butter within a limited ceiling.

In the Bombay market the price of groundnut (Karad bold) rose by 8.1 per cent over the month to Rs 637 per quintal.

Sugar

Sugar production during June 1981, the ninth month of the current sugar season, was lower at 7,000 tonnes as against 8,000 tonnes during the same month last year. This brought the total sugar production during the first nine months of 1980-81 season (October 1980—September 1981) to 50.48 lakh tonnes as against 38.05 lakh tonnes during the corresponding period last year. The offtake of sugar from the factories during June 1981 was 4.4 lakh tonnes for internal consumption and nil for exports as against 4.41 lakh tonnes for internal consumption and nil for exports during the same month last year. The total despatches during the first nine months were 34.88 lakh tonnes for internal consumption and 0.60 lakh tonnes for exports as against 40.86 lakh tonnes and 2.30 lakh tonnes respectively for internal consumption and exports during the corresponding period last year. The total closing stock of sugar with the factories as on June 30, 1981 was about 20.95 lakh tonnes as against 15.74 lakh tonnes on the same date last year.

The Centre has asked the sugar industry in the private and co-operative sector to undertake a commitment to supply on a loan basis up to a maximum of 4.50 lakh tonnes of free sale sugar to make up for the shortfall in the distribution of levy sugar through fair price shops. Representatives of both the sectors — Indian Sugar Mills Association and the National Federation of Cooperative Sugar Factories — agreed to make available the required quantity.

The first shipload of imported sugar out of the total contracted imports of 2.14 lakh tonnes would arrive at Kandla port by August 10 while the next shipment was expected at Vishakhapatnam port five days later. Thereafter there would be a steady arrival. Thus the imported sugar was expected to be available in time for the coming festival season.

The Centre ordered the release of 4.41 lakh tonnes sugar for internal consumption during August — 2.71 lakh tonnes of levy sugar and 1.70 lakh tonnes of free sale sugar. Compared with the July release, the free sale quota was reduced by 10,000 tonnes.

The price of sugar in the Hapur market declined by 14.9 per cent over the month to Rs 580-620 per quintal.

Rubber

The Centre decided to suspend further import of rubber due to sharp decline in the price of rubber.

Domestic production of rubber during 1981-82 was targeted at 1.60 lakh tonnes as against 1.53 lakh tonnes last year while consumption was estimated at 1.85 lakh tonnes in 1981-82 as against 1.74 lakh tonnes in 1980-81.

The Rubber Research Institute of India, (research wing of the Rubber Board) decided to take up trial rubber plantations in the Konkan region of Maharashtra. An area of 50 hectares belonging to the dairy project at Dapchari in Thane district had been taken over for this purpose.

The Centre withdrew the 8 per cent countervailing duty imposed on the import of natural rubber following a stay order of the Madras High Court on a petition filed by the industry. The duty was imposed in December 1978.

Tea

The first meeting of the reconstituted Tea Board was held at Calcutta on July 1. Inaugurating the meeting, the Union Commerce Minister, Mr Pranab Kumar Mukherjee referred to the problems of sick tea gardens and the important role of the tea industry in narrowing the country's trade gap.

Four tea estates in the Malabar area had closed down rendering 4,000 workers jobless. Several other estates in Kerala were reported to be on the verge of closure as they were unable to recover even the cost of production.

A new warehouse complex for tea was inaugurated at Cochin for the Nilgiris Small Tea Growers Service Industrial Cooperative Society. The warehouse with a capacity to store 4.5 lakh kg of tea had been constructed at a cost of Rs 10 lakhs.

Sudan had reduced the quantum of tea imports from India as the Sudan Tea Company was able to secure an import licence for just 45 per cent of the contracted quantum of 21.95 million lbs.

The price of tea in the Bombay market ruled steady at Rs 2,300 per quintal over the month.

Coffee

The United Planters' Association of Southern India urged the Union Government to give the coffee industry a fillip through a substantial upward revision in the minimum release price as the abolition of the export duty had not helped in improving the market situation. According to the Association the Government policy of pegging domestic prices between Rs 450 and Rs 560 for 50 kg for the principal grades and the steep rise in costs would land the coffee industry in difficulty.

CORPORATE SECTOR

In the market

Mayur Syntex

Mayur Syntex Ltd (Registered Office: E-29, N.D.S.E. Part II, New Delhi 110 049) is now in the capital market with a public issue of 13.30 lakh equity shares of Rs 10 each totalling Rs 1.33 crores. The proceeds will partly finance a Rs 6.23-crore spinning mill project with an initial installed capacity of 15,840 spindles for the manufacture of cotton and synthetic blended yarn at Sikandrabad, District Bulandshahr in Uttar Pradesh. Trial runs are expected to commence in August-September 1981.

Other developments

Chase Bright Steel maintains

Turnover of Chase Bright Steel Ltd for the year ended March 1981 increased to Rs 10.07 crores from Rs 8.37 crores in the previous year. The net profit, after providing Rs 7.91 lakhs (Rs 7.25 lakhs) for depreciation and Rs 6 lakhs (nil) for taxation, amounted to Rs 19.72 lakhs (Rs 27.19 lakhs). The equity dividend recommended for the year under review is 10 per cent (same). An amount of Rs 3.63 lakhs (Rs 5.59 lakhs) is transferred to investment allowance reserve and Rs 8 lakhs (Rs 2 lakhs) to general reserve.

Ahmedabad Advance: Sales dip

Sales of the Ahmedabad Advance Mills Ltd for the year ended March 1981 declined to Rs 34.42 crores from Rs 36.49 crores in the previous year. The net profit, after providing Rs 1.01 crores (Rs 85.74 lakhs) for depreciation and making no provision for taxation (Rs 70 lakhs) amounted to Rs 1.09 crores (Rs 1.11 crores). The equity dividend recommended for the year under review is 17 per cent (20 per cent) payable on the expanded capital consequent to the bonus issue made last year. An amount of Rs 46 lakhs (Rs 30 lakhs) is transferred to investment allowance reserve and Rs 5 lakhs (Rs 25 lakhs) to general reserve.

General Electric to pay 15 per cent

The General Electric Company of India Ltd has earned a net profit of Rs 2.01 crores for the year ended March 1981 after providing Rs 2.94 crores for taxation. The equity dividend recommended for the year under review is 15 per cent. An amount of Rs 5.93 lakhs is transferred to investment allowance reserve and Rs 87.86 lakhs to general reserve.

Raymond Woollen: Higher turnover

The Raymond Woollen Mills Ltd has reported higher turnover for the year ended March 1981 at Rs 56.83 crores compared to Rs 49.79 crores in the previous year. The net profit, after providing Rs 2.84 crores (Rs 2.05 crores) for interest payments, Rs 2.21 crores (Rs 1.83 crores) for depreciation and making no provision for taxation (Rs 20 lakhs), amounted to Rs 2.70 crores (Rs 2.42 crores). The equity dividend recommended for the year under review is 15 per cent (same). An amount of Rs 1.50 crores (Rs 1.18 crores) is transferred to investment allowance reserve and Rs 20 lakhs (Rs 60.27 lakhs) to general reserve. The company proposes to issue 3:5 bonus shares.

Morarjee Goculdas: Profits down

The Morarjee Goculdas Spinning & Weaving Company Ltd has reported higher sales for the year ended June 1981 at Rs 63.97 crores compared to Rs 43.25 crores in the previous year. The net profit, after providing Rs 1.23 crores (Rs 1.08 crores) for depreciation and after making no provision for taxation (Rs 80 lakhs), was Rs 1.66 crores (Rs 2.39 crores). The equity dividend recommended for the year under review is 15 per cent (20 per cent) payable on the enhanced capital as a result of the issue of bonus shares in the ratio of one for two. An amount of Rs 56.40 lakhs (Rs 55.87 lakhs) is transferred to investment allowance reserve and Rs 45.78 lakhs (Rs 1.26 crores) to general reserve. Expenditure incurred on modernisation programme was Rs 3.30 crores.

Karnataka Bank Ltd: Improved performance

Karnataka Bank Ltd, with its registered and head office at Mangalore, achieved improved results for the year ended December, 1980. Total deposits of the bank at the close of 1980 increased to Rs 115.60 crores from Rs 104.24 crores at the close of 1979. The bank's paid-up capital and reserves at the end of 1980 stood at Rs 1.08 crores which constituted 0.93 per cent of its total deposits.

Total advances at the end of 1980 amounted to Rs 60.49 crores (Rs 55.59 crores in 1979). Priority sector advances of the bank formed 33 per cent of total advances as against the level of 40 per cent prescribed by the Reserve Bank of India to be attained by the year 1985. During 1980, the bank's gross income increased by 19.7 per cent to Rs 11.38 crores (Rs 9.51 crores in 1979). It earned a higher net profit of Rs 13.60 lakhs (Rs 12.99 lakhs). The dividend for 1980 was maintained at 12 per cent (same as in 1979).

The bank opened seven branches in 1980 of which four were in rural areas, one in semi-urban area and two in metropolitan centres. With the opening of a branch at Ahmedabad, the bank has extended its operation to the State of Gujarat. At the close of 1980, the bank had a total number of 244 branches, operations being spread over six States and three Union Territories.

The Karur Vysya Bank Ltd: Good results

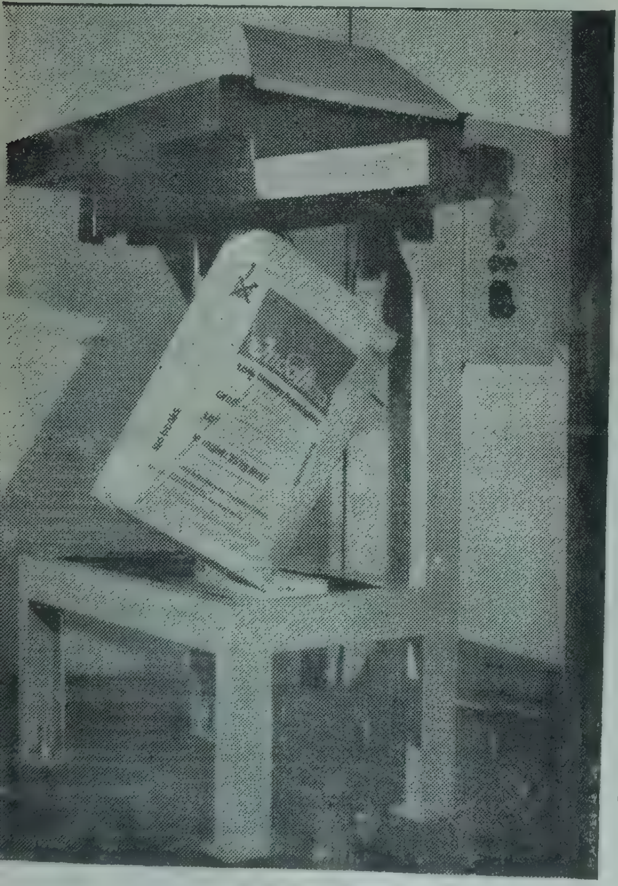
The performance of The Karur Vysya Bank Ltd (Registered office: Jawahar Bazar, Karur) for the year ended December 1980 was quite good. At the close of 1980, the aggregate deposits of the bank increased by Rs 13.33 crores or 23.3 per cent to Rs 70.55 crores (Rs 57.22 crores at the end of 1979). The total advances of the bank, including bills purchased and discounted, increased from Rs 35.65 crores in 1979 to Rs 41.90 crores in 1980 recording a growth rate of 17.53 per cent. The advances to priority sectors rose by about Rs 3 crores in 1980 forming about 31 per cent of the total advances made as against 30 per cent in 1979.

With the opening of 10 new banches, the bank's total number of branches at the close of 1980 has gone up to 126. Out of these 126 branches, 34 are located in rural areas, 49 in semi-urban, 29 in urban and 14 in metropolitan cities.

The bank's financial performance during 1980 was quite encouraging. The net profit for the year, after providing for taxation and other usual and necessary provisions, rose to Rs 14.10 lakhs from Rs 9.81 lakhs in the previous year. Including the balance brought in from the previous year and other adjustments, the total amount available for appropriation was Rs 14.19 lakhs. The directors appropriated Rs 6.40 lakhs to statutory reserve, Rs 3 lakhs to investment reserve, Rs 0.15 lakh to development reserve and Rs 0.14 lakh to charity fund. The equity dividend was stepped up from 14 per cent to 15 per cent and absorbed Rs 4.28 lakhs and the balance was carried forward. The bank's paid-up capital at the end of 1980 amounted to Rs 29.99 lakhs. Total reserves increased to Rs 70.62 lakhs from Rs 61.19 lakhs at the close of 1979.

Continuous hot air sealer from L&T

A continuous hot air sealer capable of sealing a variety of polythene bags, and with wide application in industries, like petrochemical, fertiliser, food, pharmaceutical needing to seal a wide range of bag thicknesses and sizes, has been developed by Larsen & Toubro Ltd. The continuous hot air sealer is a high production in-line machine for sealing premade, pre-filled polythene bags. The polythene bag duly filled is manually straightened at the unsealed edge and inserted into continuously moving grip belts. The bag moves into a hot air chamber and is plasticised. Further under the pressure of crimp rollers, it is fused and the pattern of the crimp roller is embossed on the bag. When it emerges, the bag is duly sealed and ready for retailing. The crimp roller can be equipped with interchangeable date codes or logo, which makes the bag proof against spurious packers. The machine is designed to take the smallest and largest bags. The smaller bags are self-supported, while the bigger bags travel on a belt which is synchronised with the speed of the sealer.



The continuous hot air sealer.

Fibreglass Pilkington to issue debentures

Fibreglass Pilkington Ltd has reported higher sales for the year ended March 1981 at Rs 11 crores compared to Rs 9.57 crores in the previous year. The net profit, after providing Rs 89.38 lakhs (Rs 78.22 lakhs) for taxation, was Rs 66.62 lakhs (Rs 54.78 lakhs). The equity dividend recommended for the year under review is 16 per cent (same). An amount of Rs 11.25 lakhs (Rs 5.80 lakhs) is transferred to investment allowance reserve. The company is shortly issuing debentures of Rs 2.63 crores.

Vickers Sperry maintains

Total income of Vickers Sperry of India Ltd for the year ended March 1981 increased to Rs 5.66 crores from Rs 5.14 crores in the pevious year. The net profit, after providing Rs 46.20 lakhs (Rs 30.84 lakhs) for interest payments and Rs 7 lakhs (Rs 32 lakhs) for taxation, amounted to Rs 45.69 lakhs (Rs 31.52 lakhs). The equity dividend recommended for the year under review is 15 per cent (same). During the year under review the company's new undertaking at Pimpri was completed in all respects. Orders on hand are Rs 5.50 crores.

Sayaji Mills earns profit

Sayaji Mills Ltd has earned a net profit of Rs 1.64 crores for the year ended March 1981 compared to a net loss of 13.25 lakhs incurred in the previous year, after providing Rs 76.91 lakhs (Rs 46.91 lakhs) for depreciation and Rs 55 lakhs (nil) for taxation. The equity dividend recommended for the year under review is 22 per cent (15 per cent). An amount of Rs 33.18 lakhs (nil) is transferred to investment allowance reserve and Rs 1 crore (nil) to general reserve.

Forthcoming company meetings

AUGUST 29 TO SEPTEMBER 4

Snowtemp Engineering Company Ltd, Delhi-Mathura Road, Faridabad-121 003. (Haryana). (*August* 31, 11.30 *a.m.*)

Kil Kotagiri Tea and Coffee Estate Company Ltd, 6/117, Race Course Road, Coimbatore-641 018 (TN). (*August* 31, 11.45 *a.m.*)

Shaktigarh Textile & Industries Ltd, 4, Government Place North, Calcutta-700 001. (*August* 31, 4 *p.m.*)

Indian Rayon Corporation Ltd, Junagadh-Veraval Road, Veraval-362-266. (*August* 31, 4.30 *p.m.*)

Standard Mills Company Ltd, Patkar Hall of S.N.D.T. Women's University, Narsinhbai Damodar Thackersey Road, Bombay-400 020. (*Sept.* 1, 3.00 *p.m.*)

Bombay Dyeing & Manufacturing Company Ltd, Birla Mathushri Sabhagar, 19, Marine Lines, Bombay-400 020. (*September* 3, 3.45 *p.m.*)

Mafatlal Fine Spg & Mfg Co Ltd, Patkar Hall, I, N.D. Thackersey Road, Bombay-400 020. (*Sept.* 4, 3 *p.m.*)

Boehringer-Knoll Ltd, Tata Auditorium, Bombay House, Bombay-400 023. (*Sept.* 4, 10.30 *a.m.*)

East India Hotels Ltd, Oberoi Grand Hotel, 15, Jawaharlal Nehru Road, Calcutta-700 013. (*Sept.* 4, 11 *a.m.*)

Firth (India) Steel Company Ltd, J.K. Auditorium, Thane Manufacturers Association Hall, Wagle Estate, Thane-400 604. (*Sept.* 4, 11 *a.m.*)

Aryan Brush Co Ltd, M.C. Ghia Hall, Bhogilal Hargovindas Building, 18/20, K. Dubash Marg, Bombay-400 023. (*Sept.* 4, 4 *p.m.*)

PUBLIC SECTOR

United Commercial Bank: Record rise in deposits

The United Commercial Bank made its record increase in deposit accretions from Rs 1,493 crores in 1979 to Rs 1,905 crores in 1980. The bank's deposit growth rate was 28 per cent during 1980, which is substantially higher than the 16 per cent average growth of all the scheduled banks of the country.

The total advances of the bank rose from Rs 917 crores in 1979 to Rs 1,125 crores in 1980. The share of priority sector credit in total credit of the bank rose from 30 per cent to 33.34 per cent *i.e.* from Rs 235 crores to Rs 306 crores. Priority sector advances consisted of Rs 128 crores (previous year Rs 94 crores) for agriculture, Rs 135 crores (previous year Rs 105 crores) for small scale industries and the balance for retail trade, professionals, self-employed, education etc.

The bank made concerted effort to increase credit under Differential Rates of Interest Scheme and the amount advanced formed 0.87 per cent of the total advances in 1980.

The bank has added as many as 148 branches in 1980 and the total number of branches reached to 1,267. Besides, the bank has 9 overseas branches. Of the 148 branches opened in 1980, 124 were opened in the villages. The areawise break up of branches the end of 1980 was as follows, rural 616, semi-urban 259, urban 226 and metropolitan 166.

Under the Village Adoption Scheme, the bank adopted 4,539 villages which were spread out in almost all the states. 1,22,425 borrowal accounts under the scheme enjoyed a credit of Rs 30 crores representing a 27.9 per cent increase over that of the previous year. Although branching out in rural areas meant a slow-down in commensurate returns, the bank improved its net profits from Rs 2.22 crores in 1979 to Rs 2.28 crores in 1980.

New Bank of India : Deposits up

The operations of New Bank of India (nationalised on April 15, 1980) during the year ended December 1980 were quite satisfactory. Despite various constraints, the bank's deposits increased by Rs 61.22 crores from Rs 442.06 crores as at the end of 1979 to Rs 503.28 crores as at the close of 1980 and recorded a growth rate of 13.8 per cent. The average deposit per branch at the end of 1980 showed an increase of Rs 8.73 lakhs over the previous year's figure and stood at Rs 1.18 crores.

The bank's total credit advanced in 1980 rose to Rs 256.62 crores (Rs 252.87 crores in 1979). While the increase in advances was Rs 4.05 crores, the increase in priority sector advances was of the order of Rs 7.89 crores *i.e.*, from Rs 71.76 crores to Rs 79.65 crores. There was a growth of 10.99 per cent in priority sector advances over the previous year. During 1980 the bank added 8,671 priority sector accounts to its previous year's figure of 21,440. The priority sector advances as on December 26, 1980 constituted 31.07 per cent of total advances. Advances to agricultural sector increased from Rs 14.77 crores to Rs 19.52 crores and recorded a growth of 32.16 per cent.

The total number of villages adopted by the bank increased to 487, thereby increasing the beneficiaries also. The bank's participation in ARDC (Agricultural Refinance Development Corporation) refinance scheme also improved. The bank drew Rs 3.36 crores by way of refinance and repaid Rs 1.16 crores during 1980. The refinance obtained from ARDC as at the end of 1980 stood at Rs 6.89 crores. The bank laid more emphasis on increasing its outlay under the DRI (Differential Rate Interest) Scheme. More loans were advanced under the above scheme, raising the total outstanding to Rs 77.52 lakhs in 5,922 accounts.

In 1980, the turnover of foreign exchange business increased to Rs 163 crores (Rs 156 crores in 1979). The export finance outstanding as at the close of 1980 was Rs 16.96 crores. It financed construction contracts/turnkey projects undertaken by its clients in Iraq and Saudi Arabia. Guarantees in this respect outstanding at the close of 1980 was Rs 15 crores.

The bank opened 22 new branches in 1980, raising the total number of branches to 423. Out of the total number of branches, 165 were in rural areas, 104 in semi-urban centres, 87 in urban centres and 67 in metropolitan areas.

State Bank of Patiala : Deposits up by 30 per cent

The operations of State Bank of Patiala during the year ended December 1980 resulted in a growth of 30 per cent in its aggregate deposits to Rs 356.10 crores from Rs 273.92 crores, at the close of 1979. While Rs 197.89 crores of these deposits were mobilised from the rural areas, deposits from urban and metropolitan areas accounted for Rs 158.21 crores. The bank's total advances during 1980 increased to Rs 233.73 crores from Rs 207.47 crores at the end of 1979.

Advances to priority sectors, *viz* agriculture, small scale industry and small business finance, were also higher at Rs 111.04 crores (Rs 96.88 crores in 1979) and constituted 47.5 per cent of the total advances of the bank, as against the stipulated level of 40 per cent prescribed by the Government to be achieved by 1985. Agricultural advances rose by 24.35 per cent to Rs 65.25 crores (Rs 52.47 crores) and accounted for 27.91 per cent of the total advances. By the end of 1980, the bank had adopted 3,498 villages for assisting 47,846 farmers. The bank formulated 260 schemes under ARDC programme covering a wide range of agricultural and allied activities and disbursed loans aggregating Rs 42.43 crores under such schemes. Total loans granted to small and marginal farmers amounted to Rs 9.99 crores and formed 20.05 per cent of the direct advances in agricultural sector. During 1980, the advances to small scale industries totalled Rs 33.89 crores.

In 1980, the bank provided financial assistance to the tune of Rs 2.09 crores as DRI (differential rate of interest) advances assisting 18,058 persons. Sixty four per cent of these loans were to persons belonging to scheduled castes/scheduled tribes.

With the opening of 40 more branches, the bank's total number of branches at the close of 1980 stood at 365.

Air India among top 15

Air-India has been ranked among the top fifteen scheduled international airlines, in overall performance last year, according to the world airline statistics published by the International Air Transport Association. These figures place Air-India in the 13th position in 1980 in terms of international passenger, cargo and mail revenue tonne kilometers (RTKms) with a total RTKm performance for the year of 933 million. This represents a sharp increase of 159 million RTKms over Air-India's performance in 1979, or an increase of 120 per cent. The total number of revenue passengers carried by Air-India in the financial year 1980-81 was 1,417,817, or 27,265 passengers per week.

The only other Asian airline among the leaders was Japan Airlines which stood second with British Airways topping the list. The other international IATA carriers ahead of Air-India in 1980 were Air France, Lufthansa, KLM, Qantas, TWA, Alitalia Swissair, Air Canada, Iberia and SAS.

Hindustan Organic Chemicals: Higher sales

Hindustan Organic Chemicals Ltd has reported higher sales for the year ended March 1981 at Rs 34.41 crores compared to Rs 31.24 crores in the previous year. Exports during the year under review were Rs 1.39 crores. The operating profits were Rs 5.88 crores (Rs 5.37 crores). Dividend declared for the year is 8 per cent. An amount of Rs 3.10 crores is transferred to general reserve.

The 16,500 tonnes per annum concentrated nitric acid plant by HOKO process, hydrogen (600 tonnes per annum), nitrobenzene (11,000 tonnes per annum), and aniline (6,000 tonnes per annnum) have all been completed. The Rs 1.20 crores effluent detoxification plant forming part of the company's integrated pollution control programme has been completed. The incinerator unit will be installed shortly.

Among the other on-going schemes, nitrotoluene expansion from 3,090 tonnes to 6,180 tonnes per annum and the acetyl group of plants for manufacture of 3,330 tonnes per annum of acetic acid and acetic anhydride will be completed by December 1981 and nitrochlorobenzene expansion from 3,315 tonnes to 9,000 tonnes per annum will be completed by December 1982.

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Adarsh Chemicals & Fertilizers		Coromandel Fertilisers		Dharamsi Morarji Chemical Company		Gujarat State Fertilizers Co.		Mangalore Chemicals & Fertilizers	
Industry Group	Metal Products		Metal Products		Metal Products		Metal Products		Metal Products	
	Year ended December		Year ended September		Year ended September		Year ended December		Year ended May	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1980	1981
Liabilities (at the end of the year)										
1. Net worth (i+ii)	535.8	619.6	277.8	319.6	1,812.0	1,958.5	178.9	230.8	238.8	362.7
(i) Paid-up capital (a+b)	282.8	282.8	146.4	146.4	694.1	694.1	80.1	84.6	144.0	144.0
(a) Equity	282.8	282.8	134.4	134.4	664.1	664.1	71.1	75.6	114.0	114.0
(b) Preference	—	—	12.0	12.0	30.0	30.0	9.0	9.0	30.0	30.0
(ii) Reserves	253.0	336.8	131.4	173.2	1,117.9	1,264.4	98.8	146.2	94.8	218.7
2. Borrowings (i+ii)	30.1	209.5	330.2	316.5	3,285.9	4,319.4	182.1	289.8	288.7	390.7
(i) Long-term	5.1	184.7	18.2	24.5	1,407.3	1,731.5	71.9	125.2	137.9	180.9
(ii) Short-term	25.0	24.8	312.0	292.0	1,878.6	2,587.9	110.2	164.6	150.8	209.8
3. Non-current liabilities and provisions	—	—	—	—	114.4	123.4	—	—	—	—
4. Current liabilities and provisions	251.2	220.1	191.6	206.5	1,419.3	1,835.3	142.5	180.8	152.7	481.8
Assets (at the end of the year)										
5. Gross fixed assets	691.2	899.8	591.4	698.1	4,078.2	4,919.2	343.3	485.9	383.8	516.8
6. Less depreciation	383.4	422.6	314.1	337.0	1,219.1	1,478.2	98.6	126.9	115.7	142.3
7. Net fixed assets (5—6)	307.8	477.2	277.3	361.1	2,859.1	3,441.0	244.7	359.0	268.1	374.5
8. Current assets (i+ii+iii)	509.3	572.0	522.0	481.2	3,741.2	4,767.5	257.4	341.0	412.1	860.7
(i) Inventories	182.5	188.3	284.9	203.1	1,983.7	2,495.7	111.4	120.6	227.5	639.0
(ii) Receivables and loans and advances	285.1	323.2	230.0	250.1	1,598.9	1,931.6	140.7	207.1	149.6	170.8
(iii) Others	41.7	60.5	7.1	28.0	158.6	340.2	5.3	13.3	35.0	50.9
9. Other assets	—	—	0.3	0.3	31.3	28.1	1.4	1.4	—	—
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**817.1**	**1,049.2**	**799.6**	**842.6**	**6,631.6**	**8,236.6**	**503.5**	**701.4**	**680.2**	**1,235.2**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,348.0	1,653.2	912.6	933.3	11,693.9	9,704.1	682.3	929.1	1,422.3	2,120.3
11. Increase in stock of finished goods and work in progress	31.8	-13.2	-5.1	-31.0	72.1	232.7	-10.3	6.9	-24.9	68.8
12. Value of production (10+11)	1,379.8	1,640.0	907.5	902.3	11,766.0	9,936.8	672.0	936.0	1,397.4	2,189.1
13. Other income	13.8	15.4	6.2	3.7	24.7	27.2	1.6	1.5	5.3	15.8
Expenditure										
14. Materials, stores and other mfg. expenses	687.1	892.8	492.6	419.1	7,635.3	6,577.8	342.6	517.0	1,102.6	1,775.5
15. Current repairs	86.4	102.8	9.0	9.2	123.0	104.4	19.1	32.6	6.6	7.5
16. Salaries and wages	235.9	264.0	171.3	181.4	1,894.0	1,535.7	140.8	173.0	67.2	88.1
17. Welfare expenses	22.5	24.7	6.1	13.4	138.0	129.6	7.3	8.3	10.5	15.1
18. Managerial remuneration	—	—	1.4	0.3	—	—	0.7	0.5	—	1.5
19. Other expenses	47.3	57.3	72.8	93.0	599.5	512.7	49.5	64.4	52.4	84.4
20. Depreciation	41.3	56.4	20.3	22.9	175.8	276.0	18.5	29.6	22.0	26.7
21. Other provisions	—	—	—	—	15.2	15.4	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	273.1	257.4	140.2	166.7	1,209.9	812.4	95.1	112.1	141.4	206.1
23. Interest	0.7	10.1	52.3	61.1	479.2	612.5	30.8	39.9	42.7	57.0
24. Tax provision	162.0	101.4	49.8	39.0	132.0	2.0	25.6	13.3	—	—
25. Profit after tax (22—23—24)	110.4	145.9	38.1	66.6	598.7	197.9	38.7	58.9	98.7	149.1
Appropriations										
26. Dividends (i+ii)	62.2	62.2	24.2	26.9	141.7	84.5	11.6	12.5	22.5	25.7
(i) Equity	62.2	62.2	22.9	25.6	139.5	83.0	10.6	11.6	11.1	22.8
(ii) Preference	—	—	1.3	1.3	2.2	1.5	1.0	0.9	11.4	2.9
27. Profit retained (25—26)	48.2	83.7	13.9	39.7	457.0	113.4	27.1	46.4	76.2	123.4
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,393.6**	**1,655.4**	**913.7**	**906.0**	**11,790.7**	**9,964.0**	**673.6**	**937.5**	**1,402.7**	**2,204.9**
Operational indicators (per cent)										
(a) Net worth/total net assets	65.6	59 1	34.7	37.9	27.3	23.8	35.5	32.9	35.1	29.4
(b) Inventories/net sales	13.5	11.4	31.2	21.8	17.0	25.7	16.3	13.0	16.0	30.1
(c) Operating profit/net sales	20.3	15.6	15.4	17.9	10.3	8.4	13.9	12.1	9.9	9.7
(d) Operating profit/total net assets	33.4	24.5	17.5	19.8	18.2	9.9	18.9	16.0	20.8	16.7
(e) Profit after tax/net worth	20.6	23.5	13.7	20.8	33.0	10.1	21.6	25.5	41.3	41.1
(f) Equity earning/equity capital	39.0	51.6	27.4	48.6	89.8	29.6	53.0	76.7	76.6	128.2
(g) Equity dividend	22.0	22.0	17.0	19.0	21.0	12.5	15.0	16.0	10.0	20.0
(h) Equity dividend coverage. (No. of times)	1.8	2.3	1.6	2.6	4.3	2.4	3.5	4.8	7.7	6.4
(i) Paid-up value per equity share (Rs.)	10.00	10.00	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	34.00	36.00	245.00	257.50	24.25	18.50	14.25	23.50	20.00	37.00
(k) Gross yield	6.5	6.1	6.9	7.4	8.7	6.8	10.5	6.8	5.0	5.4
(l) Gross fixed assets formation	10.0	30.2	1.8	18.0	67.3	20.6	20.3	41.5	5.5	34.7
(m) Debt/equity	0.01:1	0.30:1	0.07:1	0.08:1	0.78:1	0.88:1	0.40:1	0.54:1	0.58:1	0.50:1

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of
items so as to show the true profit pertaining to the

EQUITIES

Bonus guidelines dampen scrips

Bombay, August 24

The revised bonus guidelines announced by the Government on August 18 scared the marketmen. Bulls, therefore, became active sellers during the past week. At the close of the week, modest-to-marked losses were widespread. Activity was fair and the undertone at the close was weak.

Starting on a promising note share prices advanced satisfactorily. The announcement of revised bonus guidelines raising the time limit from one bonus issue to another to 36 months from 24 months, residual reserves to 40 per cent from 33.33 per cent, NOC from financial institutions in case of failure in the payment of term loans, etc, led to heavy selling pressure. As no worthwhile support was coming even at the lower rates, shares generally closed at the week's worst levels.

BSE, however, lifted the daily margins imposed on 10 scrips on July 20. The announcement has been made only after the official closing of business on August 21. The removal is expected to have a salutary effect on equity sentiment next week. The scrips, which attracted the daily margins in case of excessive buying, were Century, Baroda Rayon, Gwalior Rayon, Reliance, Hindustan Aluminium, Tata Steel, Hindustan Motors, Premier Automobiles, TELCO and GE Shipping.

In the cleared list, Century faced heavy bull liquidation and the price slumped to Rs 805 from the week's best level of Rs 844. The closing was at Rs 808, recording a huge loss of Rs 29.50 from the previous week's closing rate of Rs 837.50. Standard dropped by Rs 26 to Rs 527. TELCO was marked down by 38 points to Rs 618.

The other losers were National Rayon, Walchandnagar Industries, Amar Dye-Chem, Gwalior Rayon, Hindustan Motors, Tata Oil, Tata Chemicals, Mukand, L & T, Voltas, G. E. Shipping, Scindia, Polychem, Bombay Dyeing, Khatau, Morarjee, Svadeshi Mills, Swan and Tata Mills. Surprisingly against the general declining trend, Tata Steel held the ground firmly at Rs 349.50.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 15-8-81	High	Low	Closing quotations 22-8-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	245.00*	222.50	215.00	222.50
Bombay Dyeing (25)	91.00	93.00	85.00	85.00
Central India (50)	62.00	61.00	58.00	60.00
Century (100)	837.50	844.00	805.00	808.00
Dawn (50)	70.00	76.00	73.00	73.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	112.50	110 00	107.50	107.50
Gokak (100)	203.00	205.00	202.00	203.00
Gwalior Rayon (10)	61.00xd	61.25	57.60	57.75
Khatau (100)	265.00	270.00	262.50	262.50
Koninoor (100)	56.00	57.00	54.00	54 00
Morarjee (100)	250.00	250.00	245.00	245.00
National Rayon (100)	365.00	360.00	355.00	355.00
New Great Eastern (100)	93.00	100.50	93.00	100.50
Phoenix (100)	47.00*	—	—	47.00*
Podar (10)	8.00*	8.00	8.00	8.00
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	72.00	72.50	71.50	72.50
Standard (100)	553.00	557.00	516.00	527.00
Svadeshi (100)	168.00	170.00	166.00	167.00
Swan (100)	207.50	217.50	207.50	215.00
Tata Mills (25)	27.00	30.00	24.00	26.00
Electric				
Ahmedabad (100)	102.00	101.00	99.00	99 50
Andhra Valley (100)	148.00	132.00xd	128.00xd	129 00xd
B.Subarban (100)	122.50*	125.00	119.50	120.50
Tata Hydro (100)	149.00cd	132 50xd	130.00xd	130.00xd
Tata Power (100)	146.00cd	146.00cd	129.00xd	129.00xd
Steel				
Mukand (10)	29.50	30.25	27.25	27.75
Tata Steel (100)	349.00	371.00	344.00	349.50
Engineering				
Larsen & Toubro (10)	61.50	63.00	59.50	60.00
Tata Eng. & Loco (100	656.00	672.00	610.00	618.00
S.L.M. Maneklal (100)	195.00	200.00	187.50	197.50
Voltas (100)	202.00	204.00	194.00	199.00
Walchandnagar (100)	227.50	227.00	210.00	210.00
Dyes & Chem				
Amar Dye-Chem (100)	150.00	150.00	140.00	142.50
Indian Dyestuff (100)	242.00xd	240 00	215.00	225.00
Polychem (50)	72.00	73.00	70.00	70.00
Tata Chemical (10)	66 00	67.75	62.00	62.00
Shipping				
Great Eastern (10)	52 00	52.00	47 75	50.00
Scindia (20)	27.00	28.15	25.25	26.15
Cement				
A.C.C. (100)	145.00	157.00	142.00	144.00
Shree Digvijay (100)	160.00	160.00	155.00	155.00
Sugar				
Maharashtra (50)	53.00	53.00	51.00	51.00
Phaltan (50)	43.00	43.00	42.00	43.00
Miscellaneous				
Bombay Burmah (25)	45.50	45.50	43.00	44.00
Hindustan Motors (10)	29 00	28.75	26.25	26.75
Premier Automobiles (100)	242.00	248.00	230.00	241.00
Pre. Construction (50)	78.00	80 00	78.00	79.00
Sirpur Paper (10)	33.50	34.00	31.00	31.00
Tata Oil (25)	76.00xd	78 00	69.00	69.00
W. Coast Paper (100)	107 50	107.50	102.50	102.50
Wimco (10)	14.75	14.75	11.25	14.50
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	[illegible]	348.00	318.00	325 00
Century Enka (100)	710.00	710.00	675.00	680.00
Garware Nylons (10)	36 50	37.50	35.00	35.00
Gold Mohur (100)	92.00	—	—	92.00*
Indian Rayon (10)	97.00	98.00	83 50	87.00
J. K. Cotton (10)	18.75	19.00	17.50	17.50
J. K. Synthetics (10)	52.75	53.25	50.50	50.50
Lakshmi Vishnu (100)	55.00	57.50	55.00	55.00
Mafatlal Fine (100)	237.50	237.50	230 00	235.00
Mafatlal Industries (125)	387 50	387.50	382.50	385.00
Modella Woollen (10)	10.00*	10.00	9.75	9.75
Modipon (10)	67.00*	—	—	67.00*
Nirlon (10)	65.00	64·50	69.75	60.00

	Closing quotations 15-8-81	High	Low	Closing quotations 22 8-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	59.00	58.00	53.50	54.00
Reliance Textile (10)	102.25	103.50	91 00	92.25
S. I. Viscose (100)	272.00	282.50	245.00	252.50
Stretch Fibres (10)	9.00	9.00	9.00	9.00
Swadeshi Polytex (10)	15.25	16.00	14.75	15.25
Electric				
Amalgamated (10)	7.50*	7.00	7.00	7.00
Surat (100) ...	103.00	104.00	104.00	104.00
Cement				
Mysore Cement (10)	35.00	35.00	33.50	34.00
Saurashtra Cement (100)	110.00*	—	—	110.00*
Paper				
Andhra Paper (100)	235.00*	—	—	235.00*
Bhadrachalam (10)	17.50*	—	—	17.50*
Jayant Paper (100)	165.00	—	—	165.00*
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	35.00	36.00	35.00	35 50
Ferro Alloys (100)	285 00	285.00	275.00	275.00
Hind Aluminium (10)	55.00	54.50	51.50	51.50
Khandelwal Ferro (100)	130.00	131.25	128.75	131.25
Mahindra Ugine (10)	53.50	56.50	54.00	54.50
Tata Yodogawa (100)	130.00*	—	—	130.00*
Engineering				
Associated Bearings (100)	375.00	376.25	372.50	372.50
Bimetal Bearings (10) ...	42.00	42 00	41.00	41.00
Blue Star (10)	36.25	36.00	35.00	35.50
Elecon Engineering (100)	435.00*	—	—	435.00*
Gujarat Steel Tube (100)	670.00	670.00	650.00	650.00
Hindustan Brown (100)	306.25	—	-	303.25*
Ingersoll-Rand (10) ...	102.00	116.00	102.00	102.00
Jyoti (100)	265.00	265.00	243.75	253.75
Kirloskar Cummins (100)	245.00	552.50	540 00	540.00
Kirloskar Oils (10) ...	28.50	30.00	27.00	27.00
Kirloskar Pneumatic (10)	54.00	54.00	53.00	53.00
Mahindra (10)	56.00	56.00	50.00	51.00
New Standard (100) ...	130.00	130.00	121.25	121.25
Sandvik Asia (100) ...	340.00*	—	—	340.00*
Vulcan-Laval (10) ...	34.50	[illegible]	33.50	33.50
Zenith Steel (10) ...	48.00	[illegible]	45.00	45.00
Cables & Elec.				
Asian Cables (100) ...	212.50cr	237.50	212.50	237.50
Bajaj Electricals (100) ...	202 50	202.50	200.00	200 00
Crompton Greaves (100)	372 50	372.50	365.00	365.00
Otis Elevator (10) ...	56.00	56.00	53.50	54 50
Siemens India (10) ...	54.00	56.50	53.00	53.50
Chemicals				
BASF (10)	58.00	58.50	56.00	58.00
Bayer (India) (100) ...	252.50	252.50	235.00	237.50
Chem & Fibres (10) ...	20.75	21.00	20.00	20.50
Colour-Chem (100) ...	212.50	205.00	199.00	197.50
German Remedies (10)	25.00	25.50	25.00	25.50
Gujarat State Fert. (100)	445.00	460.00	424.00	429.00
Hindustan Lever (10) ...	43.00	43 25	42.00	42.75
Indian Organic (100) ...	340.00	357.50	320.00	320.00
National Organic (100)	220.00	220.00	210.00	215.00
Pfizer (10)	26 25	26.00	25.25	25.50
Polyolefins Ind. (100) ...	297.50	307.50	295.00	300.00
Sandoz (10)	26 50	26 50	25.50	25.75
Synthetics (100) ...	101.00	103 00	100.00	100.00
Warner-Hindustan (10)	24.50*	23 50	23 00	23.00
Zuari Agro (10)... ...	27.00	21.50	26.00	26 50
Miscellaneous				
Bajaj Auto (100)	1,660.00	1,625.00	1,500.00	1,540.00
Bombay Oxygen (100)	115.50	117.00	110.00	115.00
Cadbury (10)	20.00	20.50	19 50	20.25
Camphor & Allied (100)	230.00	230.00	225.00	227.50
Ceat Tyres (100) ...	200.00	200.00	200 00	200.00
Colgate-Palmolive (10)	142.00	143.00	135.00	135.00
Empire Industries (15)	30.50*	—	—	30.50*
Fibre glass (10) ...	22 00	24.00	21.00	23.00
Gammon India (10) ...	22.75	22.50	21.00	21.00
Hindustan Ferodo (10)	42 50*	—	—	42 50*
Hoechst Dyes (10) ...	26.50	26 50	25.25	25 25
Indian Hotels (10) ...	91.00	92.00	75.00	79.00
Motor Industries (100)	475.00	475.00	450.00	461.25
Tata-Finlay (10) ...	12.00	12.50	12.00	12.50

Notes : Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

Market Gossip

Bata take-over?

A PERSISTENT rumour in the local business circles these days is that Bata India, once a blue chip on the Calcutta Stock Exchange and one of the prominent and prosperous companies based in the eastern region, has been facing bad days. Worried by chronic labour trouble and rising costs all round, the foreign shareholders who still retain the controlling interest of 40 per cent are contemplating to sell away their holdings to some Indian business house. All kinds of names, big and small, are being mentioned including even Tatas. No ready confirmation is available but a change of management cannot be ruled out if the unsatisfactory conditions persist for long.

The first sign of a crisis in the company's long business career came when it had to drop some 150 highly paid managerial personnel. That slimming apparently has not helped the company much. In his address from the chair, Mr P. K. Nanda at the last annual general meeting gave some idea of the crisis that has overtaken the company for some time. Referring to the results of 1980, he said that, although sales growth in value terms was still 14 per cent, retail sales in quantity were static and there was a decline of six per cent in wholesale trade. The company faces environmental difficulties, of course, but the real key to growth and profitability lay in improved production at the factories particularly the main one at Batanagar.

Far from there being any improvement a series of agitations and work stoppages "caused by unwarranted and irresponsible union action" led to a sharp drop in production in many lines. One of the high priority export orders could not be met and costs particularly wages continued to grow. Consequently Batanagar maintained its uninterrupted record of a heavy drain on profitability. Operating losses is that factory over the last four years have crossed the Rs 10 crores mark. Meanwhile costs continue to escalate making the situation steadily more difficult. The immediate prospects were quite uncertain, according to Mr Nanda.

Bata India chairman's observations on the prospects for the company were made only last April. Since then nothing much has happened to alter the outlook. According to observers a bad position is moving towards worse and so takeover rumours keep circulating. Some one has also suggested that in keeping with the trend in this part of the country Bata India may even become a government company some day!

For those who may be interested in the financial results of the company here are the figures : sales in 1980 totalled Rs 111.73 crores representing in value terms a rise of 14.5 per cent but the profit at Rs 11.8 million showed a heavy fall. With taxation taking away Rs 8.4 million the after-tax profit was only Rs 3.4 million against the previous year's Rs 6.1 million. A 10 per cent dividend has been paid practically absorbing the entire net profit.

Buoyant groundnut oil

BOTH the trade and the government would seem to be attempting to create illusions in the mind of the public that they are trying to find a way out of the runaway groundnut oil prices. The Bombay trade has accepted a voluntary ceiling of Rs 165.36 per 10 kg, which was actually even higher than the season's peak of Rs 164.84. Certainly the trade was not helping the consumer but wanted to make sure of its extra profits. The Government of Maharashtra, on the other hand, promised to supply one kg of groundnut oil per ration card in Bombay and that too at Rs 16 per kg. Apart from the fact that this was evidence enough of the Government's incapacity to arrange proper and adequate supplies, depending on the number of members in a family, the price was not much different from the market price.

For the consumer edible oils have already become a luxury and the authorities are not even able to guarantee proper distribution of cheaper imported oils through fair price shops. It is an open secret that these imported oils find their way into the open market. The states are already reported to have received five lakh tonnes of these imported oils for distribution through fair price shops at a price of Rs 8,500 per tonne but the ordinary consumer has not benefited.

Sluggish aluminium?

HAS the world market in aluminium turned sluggish? International giants such as Alcoa and Alcan feel it that way and production of bauxite in Jamaica is being planned to meet this slackness in demand. Jamaica's bauxite production for the first six months of the current year was 6.1 million tonnes. This showed an increase of 6.3 per cent over production in the first half of last year. Alumina exports were also up by 11.4 per cent reaching 1.3 million tonnes. The Jamaica Bauxite Institute has reported that these increases were achieved despite the fall in the production of bauxite as a result of output cuts by Alcoa and Alcan. The Institute expected the production during the rest of the year to be reduced further with the result that 1981 bauxite mine output would be below last year's level.

Cheerful zinc

THERE has been a sharp increase during the current year in the European producers price for zinc from $925 to $1,000 a tonne. Cominco had increased earlier the prices by $50 to $875 in April and to $925 in May. Cominco's example is sure to be copied by other producers. A world-wide shortage of concentrates resulting from mine output cutbacks and strikes has been reported and there has been a spurt in London Metal Exchange values of zinc as also in the price paid by the US producers for their concentrates. But the recent increase of $75 in the producers price had no impact on the London Metal Exchange, which is relevant in considering the prices charged by the MMTC.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*August 24, 1981*	*A week ago*
Groundnut	*(Rajkot)*	546	550
Rapeseed	*(Kanpur)*	525	523
Sesamum	*(Delhi)*	640	683
Castorseed	*(Kanpur)*	293	288
Linseed	*(Kanpur)*	535	533
Sugar	*(Bombay) (a)*	549	625
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	240	240
Aluminium	*(Bombay) (d)*	1,515	1,505
Copper	*(Bombay) (e)*	3,670	3,690
Lead	*(Calcutta) (f)*	1,250	1,300
Zine	*(Calcutta) (g)*	1,705	1,732
Gold	*(Bombay) (h)*	1,755	1,730
Silver	*(Bombay) (i)*	2,760	2,695
Caustic soda	*(Bombay) (j)*	613	610
Soda ash	*(Bombay) (k)*	242	242

*** In terms of 10 gm for gold, kg. for silver and candy for cotton**

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996. (j) Flakes and (k) Tata

COMMODITIES

Cotton prices harden

Bombay, August 24

Cotton prices hardened during the past week by Rs 50 to Rs 150 per candy ignoring the prospects of early import of Pakistan cotton. Apart from the delay in announcing the terms and conditions, time was also lost in seeking clarifications about various vague details. Will all the exporters of textiles be eligible for getting the Pakistan cotton? Or only those who have deals with quota countries? A thousand and one questions had to get the answers before anyone could register their names with the CCI.

Although a little under half the quantity now contracted for had been reportedly booked, cotton circles are of the view that whatever little interest there is now in Karachi cotton would peter out once equivalent Punjab cotton from the new crop starts coming into the market. Meanwhile there are reports of the possible import of one more lakh bales of Pakistan cotton before the first lot has been cleared.

Meanwhile, significantly enough the Indian Commerce Minister told Parliament that while India was keen on expanding trade between the two countries on account of locational advantage, Pakistan was not agreeable to this.

The following has been the trend of prices of some of the leading varieties:

(Rs. per candy)

	August 21	August 14
Digvijay	5,000-5,100	5,000-5,100
Kalyan	4,700-4,850	4,700-4,800
Saurashtra CO2	4,900-5,100	4,800-5,050
Shankar 4	5,800-6,200	5,800-6,200
Maharashtra H 4	5,450-5,600	5,400-5,550
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,450	5,250-5,400
MP Y1	4,950-5,050	4,800-5,000
MP 1007	5,200-5,250	5,100-5,250
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100

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Yarn: Downtrend continues

Bombay, August 24

A downward trend was noticed in the local yarn market during the past week. The prices of 150D NRC, 120D NRC, 150D CR and 120D CR decreased by Rs 0.40, Rs 0.40, Rs 0.68 and Rs 0.84 to Rs 51.63, Rs 53.83, Rs 51.08 and Rs 53.68 respectively, while the price of 100D SIV increased by Rs 6.05 to Rs 61.12. The price of 150D acetate, however, remained unchanged at Rs 49.01.

Jute goods: Plan for buffer stock

Calcutta, August 17

There was a flutter in jute circles in Calcutta in the wake of the report that the Centre is seriously considering a rescue programme to bail out the jute industry from the prevailing crisis. In order to build a buffer of jute goods for stabilising the jute economy, the Director-General of Supplies and Disposals (DGS & D) might be asked to buy 100,000 bales of B-twills in addition to its usual monthly purchases. The DGS & D has been buying 35,000 bales a month on an average since the beginning of this year.

The purchase will help reduce the large inventory of mills totalling 122,300 tonnes, including 48,500 tonnes of sacking at the end of june. The reduction in the inventory will go a long way towards giving financial relief to the industry. In the process, prices of jute goods are expected to pick up. At prevailing values, mills are stated to lose considerably on their simultaneous business. The industry claims that its total loss works out to nearly Rs 12 crores each month after taking into account the recent increase in labour costs and in the price of the fibre.

If the industry is to regain its poise, steps must be taken not only to regain the lost overseas markets but also to activate domestic sales, according to informed sources. The industry has represented that the scheme of subsidy on export should be revived in order to fight competition by Bangladesh and synthetic substitutes. If the industry is helped in rehabilitating itself it will be able to raise the export of goods to the target of 550,000 tonnes a year by the end of 1984-85. The industry also feels that an export fund as recommended by the Task Force will be constituted to promote overseas sales. Contributions to the fund will be shared equally by the Government and the industry through the collection of a cess on output.

The industry is reported to have represented to the Centre to prohibit the use of old gunny bags in the cement industry. It has also taken active measures to diversify the range of products so as to cater to the requirements of overseas and domestic buyers. Reports circulate that the Centre will soon constitute a Jute Board as recommended by the Task Force for co-ordinating the functions of various bodies now operating The said board will absorb the office of the Jute Commissioner and the Jute Manufacturers Development Council.

Even as the industry is struggling hard to dispose of huge stocks held by it due to recession in overseas demand, ominous signs emerged on the horizon by way of a one-day strike staged by its workers to press for early implementation of the wage pay-scale recommendations made by the Bhattacharyya Committee with a threat from the trade unions controlling the workers of an indefinite strike

NOTICE

Universal Steel & Alloys Limited

It is hereby notified for the information of the public that Universal Steel & Alloys Ltd., proposes to give to the Central Government in the Department of Company Affairs, New Delhi a notice under sub-section (I) of Section 21, of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities. Brief particulars of the proposal are as under:

(i) Name of person/body corporate owing the undertaking:
Universal Steel & Alloys Ltd.

(ii) Capital structure of the applicant company:
Authorised capital of the company is Rs. 2.00 crores consisting of 15 lacs equity shares of Rs. 10/- each and 50,000 preference shares of Rs. 100/- each. Issued and subscribed capital is Rs. 57.50 lacs consisting of 5,75,000 equity shares of Rs 10/- each fully paid up.

(iii) Details of the proposed substantial expansion:

(a) Name of new goods to be produced, supplied, controlled or distributed or of new services to be rendered:
Not applicable.

(b) In the case of substantial expansion of existing Activities:

(i) Name of goods: Steel Ingots/Billets
(ii) Capacity before expansions: 28,000 M. Tonnes
(iii) Expansion proposed: The proposal is to produce Steel Billets with improved methods by installing continuous casting machines within the existing capacity.

(iv) Location of the project for substantial expansion: At the existing plant i.e. 12/6, Milestone, Mathura Road, P.O. Amar Nagar, Faridabad (Haryana).

(v) Brief outline of the cost of the project the scheme and sources of finance:

Cost of Project (Rs. in lacs)		Scheme and Sources of finance (Rs. in lacs)	
Buildings	1.50	Loans	50.00
Machinery	70.00	Internal generations ..	21.50
	71.50		71.50

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi within 14 days from the date of publication of this notice, intimating his views on the proposal and indicating the nature of his interest therein.

S. K. TULI
Company Secretary

Dated: 17th August, 1981.

Registered Office:
Allahabad Bank Building,
17, Parliament Street,
New Delhi-110 001.

JUGGILAL KAMLAPAT JUTE MILLS CO. LIMITED
KAMLA TOWER, KANPUR.

NOTICE

It is hereby notified for information of the Public that Juggilal Kamlapat Jute Mills Co. Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for production of 36,000 M.T. per annum capacity Asbestos Cement, corrugated, semi-corrugated, flat sheets, asbestos pipes and accessories etc. Other particulars of the proposed new undertaking are as under:—

(1)	Name of the proposed Undertaking.	:	Juggilal Kamlapat Jute Mills Co. Limited (Asbestos Cement Products Division)
(2)	Name of the person(s) or authority/authorities proposing to establish the new undertaking. Whether it is a body corporate, furnish details of its management structure together with those of proposed undertaking.	:	Juggilal Kamlapat Jute Mills Co. Limited, Public Limited Company managed by Board of Directors.
(3)	Capital structure of the applicant person or authority and of the proposed undertaking.	:	The capital structure of the applicant company as on 31-7-1981 is as under.

AUTHORISED CAPITAL:

			(Rs. in lakhs)
25,000	4½%	Income Tax Free cumulative preference shares of Rs. 100/- each	25.00
25,000	6%	Income Tax Free cumulative preference shares of Rs. 100/- each	25.00
7,50,000		Equity Shares of Rs. 10/- each	75.00
			125.00

PAID UP CAPITAL:

5,000	4½%	Income Tax Free cumulative preference shares of Rs. 100/- each	5.00
5,000	6%	Income Tax Free cumulative preference shares of Rs. 100/- each	5.00
4,87,500		Equity shares of Rs. 10/- each	48.75
			58.75

The proposed undertaking will be a division of the applicant company and, therefore, will not have separate capital structure.

(4) Proposed location of the new undertaking : In any backward district of M.P.

(5) Brief outline of the cost of project, the scheme and sources of finance : PROJECT COST:

(i)	Land	Rs. 5 Lacs
(ii)	Building	Rs. 110 Lacs
(iii)	Machinery Indigenous ..	Rs. 210 Lacs
	Imported	Nil
(iv)	Working capital	Rs. 50 Lacs
(v)	Pre-operating expenses ..	Rs. 25 Lacs
		Rs. 400 Lacs

SOURCE OF FINANCE:

(i)	Rs. 133 lacs	from internal sources
(ii)	Rs. 267 lacs	borrowings from banks and financial institutions
	Rs. 400 lacs	

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Registered Office:
Kamla Tower, Kanpur.

Dated: 17th August, 1981.

For JUGGILAL KAMLAPAT JUTE MILLS CO. LTD.
Sd/-
(P. M. DAVE)
Secretary

Edible oil prices react

Bombay, August 24

After the recent sustained rise, edible oil prices reacted in the oilseeds market during the past week. Groundnut oil declined by Rs 5.72 to Rs 158.60 per 10 kg on fears of government measures to contain the high price. Imported oils dropped on slack demand and weakness in groundnut oil. Palmoleine slipped back by Rs 2.08 to Rs 147.68, soyabean by Rs 3.60 to Rs 142.52 and RBD by Rs 5.20 to Rs 130 per 10 kg.

As a result of weakness in ground nut oil and discouraging advices from producing centres, groundnut also lost modest ground. Karad bold, Saurashtra bold and Saurashtra quality yielded Rs 6 each at Rs 640, Rs 645 and Rs 650 per 100 kg.

Activity was poor in castorseed and its oils. Buyers were cautious following lack of export inquiries. Madras small and Kanpur bold eased by a rupee each to Rs 328 and Rs 320 per 100 kg respectively. Castor commercial oil and BSS oil became cheaper by 75 paise each at Rs 70.75 and Rs 75.75 per 10 kg respectively.

Although linseed bold was steady at Rs 542 per 100 kg, its oil reacted by Rs 2.08 to Rs 133.12 per 10 kg in view of the weak trend in other oil prices.

As regards cakes, groundnut expeller, de-oil and cottonseed suffered by Rs 125, Rs 25 and Rs 100 per tonne respectively. Castor, however, remained steady at Rs 780.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils:—

	22-8-81	14-8-81
G. nut Karad bold	640.00	646.00
G. nut oil	158.60	164.32
Cast, Md. Sm	328.00	329.00
Cast. oil BSS	75.75	76.50
Cast. oil com.	70.75	71.50
Linseed bold	542.00	542.00
Linseed oil	133.12	135.20

Foodgrains weak

Bombay, August 24

A subdued tendency was noticed in foodgrains during the last week. Both wheat and rice receded on poor demand. Sellers were active in rice because of ample arrivals from the South. Coarse grains were steady barring maize which spurted on paucity of supplies. Masoor dal eased on increased supplies, while the other pulses ruled steady.

Wheat receded because of slack demand. Stockists were eager to unload. Arrivals were more than 800 bags per day. Advices from producing centres were discouraging. The inflow was good at the producing centres, while the buyers were few. The Saurashtra and superior varieties of wheat slipped by Rs 3 to Rs 220-230 per quintal and Rs 280-320 per quintal respectively. The undertone was quiet.

Rice drifted on good inflow from south by rail. Sellers were active. Stockists were keen on unloading old stocks. Surti kolam declined by Rs 10 to Rs 340-400 per quintal on poor local demand. Basmati ruled steady at Rs 450-600 per quintal. Export demand was limited.

Sugar nosedives

Bombay, August 24

Sugar prices nosedived in the local market during the last week following the liberal release of 2.25 lakh tonnes of free sale sugar (inclusive of 25,000 tonnes of imported sugar) for domestic consumption by the Centre for the month of September as compared to 1.70 lakh tonnes this month. The price of C-30 grade sugar crashed by Rs 103 to Rs 535-550 per quintal. As on August 22, 1981 the price of sugar C-30 was lower by Rs 194 per quintal than on the corresponding date a year ago.

The State sugar factories slashed their prices by Rs 88 to Rs 515 per quintal at the end of the week.

Bullion up

Bombay, August 24

Gold and silver showed an uptrend, barring a mid-week setback in the Bombay bullion market during the past week

Standard mint gold opened at Rs 1,730 per 10 gms and, after reaching the week's high of Rs 1,775 per 10 gms on August 19, receded to close at Rs 1,745 per 10 gms. Ready silver (.999 fineness) opened at Rs 2,705 per kg and went up to reach the high of Rs 2,790 per kg on August 19. Thereafter, it showed an erratic trend and was finally placed at Rs 2,765 per kg.

Money comfortable

Bombay, August 24

Conditions in the Bombay short term money market were comfortable during the past week. Interest rates opened at 9.5 per cent and moved in the range of 8 per cent and 9 per cent till August 20 (Thursday). The rates dipped to as low as 2.5 per cent the next day only to firm up once again to close at 9 per cent.

Bank credit contracts

Bombay, August 24

Bank credit of scheduled commercial banks contracted by Rs 68.36 crores to Rs 26,775.05 crores during the week ended August 14, 1981. Aggregate deposits increased sharply by Rs 152.04 crores to Rs 40,708.38 crores. The balances of banks with the Reserve Bank of India (RBI) spurted by Rs 555.65 crores to Rs 5,741.97 crores and their borrowings from the RBI went up by Rs 3.72 crores to Rs 560.59 crores.

Notice

INDIA STEAMSHIP COMPANY LIMITED

NOTICE

NOTICE is hereby given that the 53rd Annual General Meeting of the Members of the India Steamship Company Limited, will be held at GRAND HOTEL, 15, Jawaharlal Nehru Road, Calcutta-700 013, on Monday the 21st September, 1981 at 3.30 P.M. to transact the following business:

1. To receive the Directors' Report and Audited Balance Sheet and Profit and Loss Account for the year ended 31st March, 1981.
2. To sanction payment of Dividend on Preference Shares as recommended by the Directors for the years ended 31st March, 1979, 31st March, 1980 and 31st March, 1981.
3. To sanction payment of Dividend on Ordinary Shares as recommended by the Directors for the year ended 31st March, 1981.
4. To elect a Director in place of Mr K. K. Birla who retires by rotation and is eligible for re-election.
5. To elect a Director in place of Mr Dewan Dina Nath who retires by rotation and is eligible for re-election.
6. To elect a Director in place of Mr Sunil Kumar Singh Roy who retires by rotation and is eligible for re-election.
7. To appoint Auditors of the Company and for the Branch Office, Bombay, for the current year and to fix their respective remuneration. In this connection, to consider and, if thought fit, to pass, with or without modification, the following Resolutions as Special Resolutions:

RESOLVED that Messrs. G. Basu & Co. and Messrs. Singhi & Co., Chartered Accountants be re-appointed as Auditors of the Company until the conclusion of the next Annual General Meeting on a remuneration to be fixed by the Board of Directors, to be paid in equal shares to them.

RESOLVED that Messrs. Ford, Rhodes, Parks & Co., Chartered Accountants, be re-appointed as Auditors of the Bombay Branch Office of the Company until the conclusion of the next Annual General Meeting on a remuneration of Rs 5,000/-.

The Register of Members and Share Transfer Register of the Company will be closed from Tuesday, the 1st September to Monday, the 21st September, 1980 both days inclusive as notified.

By Order of the Board
A. MUKERJI
Senior Secretary.

India Steamship House,
21 Old Court House Street,
Calcutta 700 001.
The 14th August, 1981.

The dividend, if sanctioned will be payable on and after the 30th September, 1981 to those Shareholders whose names stand on the Register of the Company on 21st September, 1981.

NOTE: Member entitled to attend and vote is entitled to appoint a proxy and the proxy so appointed need not be a Member of the Company.

LE-As/181/81

Wanted a rational wage policy

Concluded from page 408

a rigid ideological egalitarianism in all matters if it conflicts with other social objectives. For instance, there may be good reasons for insisting that the wages or salaries of a highly qualified physician or a scientist be greater than those of a nurse or a mechanic. If as a result of the differential wages, the income spread between the occupations became exceedingly high, one could then use the tax laws to reduce the difference.

It is hoped that while formulating a rational wage policy, the authorities and the parties concerned would take into careful consideration the effects of some proposed or existing policy not only on some special interests in the short run but also on the general interest in the long run.

Obviously, no society can distribute more wealth than is created. No society, capitalist or socialist, can in the long run pay labour as a whole more than it produces. The best way to raise wages, therefore, is to raise labour productivity. All countries, including the Soviet Union, Yugoslavia, Cuba and China, now concentrate on stimulating and raising productivity. This can be done by many methods: by an increase in capital accumulation or modernisation of machines with which the workers are aided; by new, relevant inventions and improvements; by more efficient management on the part of employers, public or private; by greater industriousness and efficiency on the part of workers; by better education, training and more labour welfare measures; by labour participation in management and in the share capital of state enterprises.

A comprehensive wage or labour policy must pay due attention to all the factors or proposals outlined above. To see the problem as a whole, and not in fragments; that is the goal of real, enduring reforms. Real wages come out of production, not out of any decree or demand. Real wages—that is, wages in terms of goods they will buy—could really improve the living standard of workers.

Beyond headlines

Wanted a rational wage policy

By S. K. RAY

THE Government of India recently decided to set up a statutory wage board for its industrial undertakings. However, the basic question is the formulation of a rational wage policy, national in scope. The Union Government, state governments and private business managements are still making their wage policy decisions from crisis to crisis. If there is a call for a *bundh* or a threatened or actual strike in any industry, the wage policy is made in reaction to it. This is what happened recently in the jute industry, the engineering industry and some other instances.

Labour leaders' arguments for wage increases rest on concealed vote-catching considerations, and not on a careful analysis of the consequences of frequent and indiscriminate wage increases. The necessity of giving reasonable wages to create conditions for greater efficiency cannot be denied. But wage increases have occurred mostly in units where irresponsible trade unions are strong. As a consequence the costs of some of the larger units have been artificially increasing the economic strain. This, in turn, has actually accentuated industrial trouble without raising the efficiency of the workers.

Are decisions about wages merely the outcome of contents of power? Basic to everything else is a clear recognition of the fact that wages are related to productivity. Wages are the share of wage workers in the growing product, and can rise as production increases.

Wages are really paid out of the goods and services currently produced, not out of a "fund" or out of profits. The amount produced, compared with the number of people who must share in it, fixes an upper limit to wages.

But random and continuous wage increases without any consideration whatsoever for labour productivity have raised industrial costs and prices by leaps and bounds. Nearly 60 per cent of the industries have to divert 20 per cent or more of their total spending to meet the wage bill of their labour force. Taking 1961 as base, the remuneration per worker on an average has increased by 60 per cent.

In comparison with other countries, our labour productivity is quite low. Nevertheless, we have been paying labour much in excess of the rise in per capita national income. The average increase in per capita national income over the recent period has been 1.5 per cent, while the average increase in wages has been 4.6 per cent. Consequently, more purchasing power was injected than the quantum of goods and services available in the market. This has enhanced the vicious circle of rising prices and increasing costs of industrial production. The other effects of wage increases also have not been good for our economy. The transfer of purchasing power from upper income groups to labour has resulted in an overall reduction in the community's marginal propensity to save. As income is flowing more and more to wage-earners, the aggregate propensity to consume is rising, and this has further accentuated the inflationary pressure.

On the other hand, the availability of savings for the purpose of investment is dwindling. In industries where prices are controlled any rise in wages is likely to curtail their developmental potential. Where prices are not controlled, a rise in the prices of commodities as a consequence of higher labour costs primarily affects consumers. The real income of workers also can be increased by reduced prices of the things bought.

A rational wage policy must, therefore, be worked out. So far wage increases unrelated to the productivity or the actual contribution of the worker have been allowed indiscriminately. This will not help the economy, but only hurt it. Workers are not solely responsible for gains in production. Production gains arise from the accumulation of skills and technical knowledge, the use of mechanical equipment to supplement human energy, the investment of capital, managerial ability, and effort on the part of all groups of persons concerned. Economic development can be hastened only if the capital investment per worker is raised. In other words, part at least of the gains o productivity must be invested in the undertaking concerned. This may mean some conflict of interest between labour and capital in the short run, but the ploughing back of the gains of productivity will enable labour to enjoy a higher standard of living when the country passes the "take-off" stage. On the other hand, if workers insist on securing the lion's share of increased productivity, their ultimate gains will be diminished, because the shrinkage o the ploughing back of resources will lead to a lower rate of economic growth.

A rational wage policy must be based on the premise that it is not in the workers' interest to raise wages in the earlier stages of development as long as they enjoy a basic minimum wage. Only where the wage paid is below the minimum wage level would there be a case for increasing wages. An increase in productivity may be utilised to raise the wage level as long as it does not exceed the "fair wage" level, and also not impinge on the capital reqirements of industry, not injure the interests of other factors in industry and other groups in the community.

However, it is necessary to asser that each person—both in the organised and the unorganised sectors—is entitled to a basic set of services and income which provides him with adequate food, medical care and other basic necessities of life. These are matters of security and dignity which mus necessarily be the prior concern of a civilised society. In these times of inflationary pressures when money canno be relied upon to keep its value, it is vital that workers receive a substantia part of their income in the form of "rea wage" instead of "money wage." That is, they should be supplied with food shelter etc at prices that are within the range of the model income.

Also the Third World including India is essentially agricultural. There is a great need for a comprehensive legislation for agricultural labour. Among other things, it should specifically provide for hours of work, rates of wages, especially an increase in rea terms and welfare measures for agricultural workers, safeguards against exploitation by middlemen and money-lenders and similar measures.

Steps should also be taken to reduce invidious distinctions in works and wages. But one need not impose

Continued

Dr Ray is a former principal of a degree college and an author.

COMMERCE

Vol. 143 SEPTEMBER 5, 1981 No. 3664

EDITOR : VADILAL DAGLI
ASSOCIATE EDITORS : D. B. MAHATME
SUBHASH CHANDRA SARKER

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PEOPLE

Bagai

Mr M. K. Bagai, 49, has been appointed a whole-time marketing director of Hindustan Petroleum Corporation, a Government of India undertaking. He has been with the corporation for 26 years and is an electrical and mechanical engineer by profession. Mr Bagai is a fellow member of the Institution of Engineers (India) and was selected in 1980 for a course conducted by the Royal Institute of Public Administration, London.

Neelakandan

K. S. Neelakandan, manager, public relations, Pfizer Ltd, has been elected president of the Public Relations Society of India Ltd which has 800 members through its eight chapters spread all over the country. Mr Neelakandan is also the executive chairman of the Ninth Public Relations World Congress to be held in Bombay in January next under the auspices of the International Public Relations Association. The theme of the congress : The Interdependent World—Role of PR.

Krishnamurthi

Mr T. Krishnamurthi, who has taken over as general manager (planning) of the Ahmedabad circle of the State Bank of India, was till recently general manager and managing director of Kuwait India International Exchange Co, the first joint venture of the SBI in West Asia. Mr Krishnamurthi joined Imperial Bank of India in 1946 and held several responsible positions with it and also when it subsequently became State Bank of India. He is a keen sportsman too.

Dandekar

Mr Tulsidas J. Tanna has been re-elected chairman of the Oils and Seeds Importers Association of India for the year 1981-82.

Mr Y. L. Rajwade, IAS, has taken over as managing director of the Maharashtra State Financial Corporation.

Mr A. V. Dandekar has been elected president of the Baroda Productivity Council for the year 1981-82. Mr Dandekar is general manager (manufacturing operations), Jyoti Ltd.

Aggarwal

Mr Roshanlal Aggarwal comes in for the second time as the president of the Bombay Metal Exchange Ltd, the premier local body of non-ferrous metals industry and trade which is now in its silver jubilee year. Mr Aggarwal is also president of All India Ball Bearing Merchants Association and was a past president of Maharashtra Small Scale Stainless Industries Association. He has been associated with several other metal bodies and educational institutions.

THE WEEK

The Revenue Minister of Maharashtra, Mrs Shalinitai Patil, was dismissed from the cabinet by the Chief Minister, Mr A. R. Antulay, on Monday. Her dismissal came in the wake of her open criticism against the Chief Minister for forcing cooperative sugar factories to contribute to various trusts founded by him. ★

The Union Government has constituted an inter-ministerial working group under the chairmanship of the Heavy Industry Ministry's secretary, Mr D. V. Kapur, to go into various aspects of utilisation and conservation of energy. ★

For the first time Indian Standards Institution has formulated guidelines on the disposal of solid wastes by civic bodies. ★

Over Rs 2,000 crores of public funds are believed to have been locked up in sick industrial units, according to Mr D. N. Davar, general manager of the Industrial Finance Corporation. ★

The Joint Plant Committee is reported to have liberalised the distribution guidelines for all steel items except plates and structurals. The move has come in the wake of improved production at the steel plants. ★

The Union Government will pay Rs 21.56 crores free of taxes as compensation to the Burmah Oil Co for the acquisition of shares of Oil India Ltd, Assam Oil Co Ltd and Burmah Oil Co (India Trading) Ltd A bill for the take-over of the remaining 50 per cent of the shares of the three companies was introduced in the Lok Sabha on August 29. ★

The Union Government has fixed the tariff value of free sale sugar at Rs 550 per quintal with effect from September 1, (Also see page 447). ★

The Gujarat Industrial Investment Corporation has signed an agreement with Geap group of industries in the United Arab Emirates to set up a five-star hotel at Baroda. ★

Wholesale price index

At 287.7, the latest available wholesale price index for the week ended August 15, 1981 showed a rise of 0.2 per cent over the preceding week and 10.4 per cent over the year.

Money comfortable

Conditions were comfortable in the Bombay short-term money market as of Monday (August 31, 1981). In the inter-bank call section both notified and commercial funds were renewed at 9.5 per cent while fresh money was transacted at 9 per cent. The market closed

COMMERCE

Controls and corruption

NOTHING in recent memory has shocked the country so much as the disclosure, confirmed in the most authoritative manner, of the link of corruption between politicians in power and businessmen and shady characters. The *Press Trust of India* reported in its despatch dated August 28 from New Delhi that the Maharashtra Chief Minister, Mr Abdul Rahman Antulay, had admitted, while briefing Congress (I) MPs from Maharashtra on August 26, that he had collected funds while allocating cement to private contractors in Bombay. These funds had been collected through cheques and not in cash and had been kept in some *private* trusts, like Indira Pratibha Pratishthan, of which Mr Antulay himself is chairman. The funds had been collected also from industrialists and businessmen in Bombay, he added. A portion of the funds had been passed on to the president of Maharashtra Pradesh Congress Committee (I) for party work. Insofar as the Maharashtra Government itself has paid rupees two crores to the Indira Pratibha Pratishthan, any diversion of funds from this trust to MPCC (I) would mean that the government funds were being made use for party purposes.

The point to note is that the Indira Pratibha Pratishthan, incorporated on November 18, 1980 as a private trust headed by Mr Antulay, was inaugurated by no other person than the Prime Minister, Mrs Indira Gandhi, herself at the Raj Bhavan in Maharashtra. In less than a year's time the Pratishthan has collected nearly rupees five crores. As the scandal broke out into the open, Mr Antulay came out with a statement categorically denying the reports of fund collections by him. "There has been no cement deal or any other deal and no favour shown for any donations received," he said on Monday. However, his statement stood contradicted by his then cabinet colleague, Mrs Shalini V. Patil who corroborated the fact of forcible donations by mentioning a specific case of a sugar cooperative, with which she herself is associated.

This affair brings to the fore the harmful consequences of the retention of controls over a very long period of time, against which the Dagli Committee on Controls and Subsidies, appointed by the Government of India, had given a sharp warning in its report published two years ago. "Among the many sources of black money generation, the regime of controls has been an important one," the committee noted. The committee had pointed out that controls hardly helped the consumer and they led to the loss of legitimate revenue to manufacturing companies and the exchequer in various ways. While not providing an estimate of the loss of revenue arising from the existence of the outmoded controls, the Dagli Committee on controls nevertheless stated that "there is no doubt that the magnitude would be substantial".

Mr Antulay's case seems to provide a copybook illustration in substantiation of the observations of this committee. If anything, no one could have anticipated the brazen-facedness with which these corrupt practices could be pursued with reference to controls. Mrs Shalini V. Patil, who has since been sacked by Mr Antulay from his cabinet, stated, while still she was a member of the cabinet, that she had herself "handed over a sum of Rs 21.50 lakhs to Mr Antulay on behalf of the Shetkari Sahakari Sakhar Karkhana Limited of Sangli" without prior sanction from the sugarcane growers of the said cooperative. But the impropriety was not confined to payment without the consent of members of cooperatives. The directors of a cooperative society, which was so sick as to be unable to pay salaries to its staff, and whose members resolved not to pay the donation, nevertheless were coerced into making a donation, but the cheque reportedly was returned by the bank as the cooperative had no funds in its account.

Apart from using the name of the Prime Minister, which was paraded as part of the name of the so-called trust—Indira Pratibha Pratishthan—in whose name the money was collected the whole weight of the State Government machinery was brought to bear upon the collection of funds by Mr Antulay, the Maharashtra Chief Minister, as chairman of the Trust. The *Indian Express* of Bombay prominently published on the front page on September 1 the text of a telegram in which the *Maharashtra Rajya Sahakari Sakhar Sangha* had asked a cooperative to send its donation to the Indira Pratibha Pratishthan, clearly stating that the "Government of Maharashtra requires your cheque positively by 21st instant". According to the newspaper identical telegrams had been sent to all members of the Sangha. The deletion of the name of the Prime Minister, Mrs Indira Gandhi from Mr Antulay's trust which he announced as a defensive measure on Sunday, represents a meaningless action if he continues to remain Chief Minister of Maharashtra and also the chairman of the Trust. While a Chief Minister has the absolute right to choose his cabinet, the dismissal of Mrs Shalini Patil from the Maharashtra cabinet on August 31, in the wake of the furore over the disclosure of the facts of the dubious means adopted to collect funds for a trust, which was so constituted as to give Mr Antulay absolute powers to the extent of overriding even other trustees, can by no means be regarded as an action in keeping with the norms of parliamentary convention. The suspicion is irresistible that Mrs Patil's ouster was the consequence of Mr Antulay's anger over her role in exposing the manner of his fund collection. That Mr Antulay could dare to sack a cabinet colleague under such circumstances even after he had lost all moral authority is a matter of the utmost gravity, so far as the interest of decent government is concerned. It is a tragedy that the Central Government chose in Parliament to defend Mr Antulay's actions and collection of funds.

There ought to be an immediate public judicial enquiry into the matter so that all the facts are established beyond any doubt and the role of the different individuals comes out clearly before the public. At the same time the Government must scrap all such controls which breed corruption and in no case leave the distribution of cement in the hands of politicians and bureaucrats.

New horizons in Indo-French ties

SINCE the installation of the Mitterrand Government, new vistas appear to be opening in Indo-French relations. The French President's socialist tilt strikes, as it were, an ideological chord in this country. Moreover, his declared support to the cause of redressal of the rich-poor global imbalance cannot but strike an emotional chord in a country which has the unenviable position of being a leader of the poverty-stricken world. And yet, as an interview given recently by his Economics Minister, Mr Jacques Delors, to *Newsweek* shows, Mr Mitterrand is no blinkered socialist out to destroy the springs of free enterprise. Equally doubtful is the effectiveness with which he can single-handedly move, especially in view of the trends in the USA and Britain, other members of rich nations' club to adopt a more conscionable stand on the North-South dialogue. Nonetheless the new French Government's image evokes a response in New Delhi which can make for closer relations between India and France. Therefore, the recent visit of the French Foreign Minister, Mr Claude Cheysson, was in the nature of an important follow-up action to build closer ties. Equipped with wit and verbal adroitness, Mr Cheysson charmed his Indian audience and also established good rapport with Mrs Gandhi and Mr Narasimha Rao. Apart from reiterating that France would stand behind the underprivileged world, Mr Cheysson also established with his Indian hosts a near-identity of views on a broad range of subjects including Kampuchea and Afghanistan. The Indian side will pick up the thread of the Cheysson visit when Mrs Gandhi goes to France in mid-November.

In view of the unfortunate arms race in the sub-continent, triggered by the Reagan Administration's obduracy in feeding the militaristic ambitions of Pakistan's military rulers, an offshoot of greater Indo-French affinity on the political plane may be closer collaboration in the field of defence equipment. Already reports from London speak of a deal being under way in Paris for supply to India of 150 Mirage-2000, one of the most sophisticated combat aircraft and decidedly the most expensive at $25 million (Rs 20 crores) a piece. But New Delhi has as yet not said anything officially on the subject. Mr Shivraj Patil, Minister of State for Defence, told the Lok Sabha on August 20 that no final decision had been taken. However, it seems probable that the air arm of India's defence forces will become the first in the world to have Mirage-2000 in its vanguard. France, going by Mr Cheysson's replies at his New Delhi press conference, is ready to sell the plane to India and even eventually produce it in this country. An Indian military delegation is to visit France this September. When the Chief of Air Staff, Air Chief Marshal I. H. Latif, test-flew a prototype of the plane in Paris in June, a spokesman of the manufacturers, Marcel Dassault Aviation Company, expressed optimism that "the deal is sure to materialise". India's concern to step up her air defence to meet the threat from F-16, and reports of annulment of the deal with British Aerospace to make the more sophisticated version of Jaguar at HAL in Bangalore, strengthen the possibility of induction of Mirage-2000 in the Indian Air Force. HAL has had a long-standing agreement in regard to manufacture of Alouette helicopters. Indo-French collaboration also produces missiles and propellants.

Indo-French economic relations need to be bolstered. Despite her size and prosperity, France comes sixth among aid-givers, even after the Netherlands. The government-to-government French credits to India exceed 4 billion French francs (Rs 605 crores). The French aid in 1980-81 was FF 600 million (Rs 92 crores). It comprised project credits for FF 360 million and non-project credits for FF 240 million. The aid figure for this year is Rs 110 crores. President Mitterrand appears keen to take forward the initiative taken by his predecessor, Mr Giscard d' Estaing, when he visited India in January 1980, soon after Mrs Gandhi was voted to power. Notable among the Indo-French projects is the Orissa aluminium complex for which Pechiney-Ugine-Kuhlmann has signed a contract with the National Aluminium Company. In this five-year project of Rs 1,400 crores the French financial participation will be to the extent of Rs 360 crores. In addition, France has helped India to raise a Eurodollar loan of $680 million (Rs 564 crores) from a consortium of mainly French banks. A few weeks ago the Petroleum Ministry renewed, at a royalty of $50 million (Rs 40 crores), the contract with Compagnie Francaise de Petroles (CFP) for consultancy with ONGC in regard to Bombay High, whose crude production is to be raised from eight million tonnes to 19 million tonnes by 1985. Renault is in the running for the Maruti car project. France will also be a participant in the Paradip steel project irrespective of whether it goes to Davy International or Mannesman-Demag, for French companies are members of both the British-led and the German-led consortia, prominent among them being CGEE Alsthom, Fives Cail Babcock and Lurgi France. The Thal Vaishet fertiliser project will have French equipment worth Rs 450 million. Although the Visakhapatnam steel project has Russian collaboration, a Rs 1,200 million rolling mill is to be supplied by a French company called Creusot Loire. Lurgi France will supply equipment worth Rs 87 million to the Kudremukh iron ore project which has Rumanian consultancy.

While French participation in the Indian public sector projects is beginning to lengthen into an impressive list, private sector industrial collaboration has been unsatisfactory. In 1980, only 25 collaborations involving the French were sanctioned, whereas the corresponding figures in the case of the Americans, British and Germans were 125, 110 and 100 respectively. And of these few Indo-French collaborations sanctioned those envisaging financial participation were only five. Although Indian policies are no doubt somewhat restrictive, this has not discouraged the Indo-American Chamber of Commerce from describing India as a fertile soil for business. The number of Indo-German collaborations has also risen to 450. Why are the French lagging behind? Indo-French trade also needs to be expanded and diversified. In 1979 Indian exports and imports were FF 1,472 million (Rs 282 crores) and FF 1,171 million (Rs 224 crores), showing a balance in this country's favour of FF 301 million (Rs 58 crores). In the following year both Indian exports and imports increased to FF 1,490 million (Rs 277 crores) and FF 1,476 million (Rs 275 crores), with the result that the balance in India's favour was nearly wiped out. And in the April-August period this year the position has been reversed, Indian exports being Rs 56 crores and imports Rs 75 crores. The main Indian exports to France are garments and textiles, feeding stuff for animals, precious stones and hides and leather. Prominent import items are aircraft and associated equipment, iron and steel products, engineering products and inorganic chemicals. At the beginning of this year the Indo-French committee on technical and economic cooperation and the Indo-French joint business council independently made recommendations in regard to expansion of trade and joint ventures between the two countries. These ought to be studied by both the governments. Also, considering that 58 per cent of the French industrial production comes from the small and medium sector, there is scope for cooperation between it and its Indian counterpart. A cooperation plan was proposed by France last year.

Some respite in oil prices

WITH a glut in the oil market running at about two million barrels per day the meeting of the Organisation of Petroleum Exporting Countries (OPEC) at Geneva could not have bargained for a higher price from the consumer countries. This glut has come about despite OPEC production dropping to around 22 million barrels per day (bpd) from 30 million bpd early last year, with Saudi Arabia meeting a little less than 50 per cent of the supplies. The glut had already affected some African producers with Nigeria's production dropping sharply from 1.8 million bpd in the early part of this year to as little as 600,000 bpd and Libya's output slumping to 450,000 barrels per day from a level of 1.4 million barrels per day that it planned and 700,000 bpd at least that it would like to ensure for itself to meet the foreign exchange commitments. Following the Geneva meeting and Saudi Arabia's refusal to increase its price beyond $ 32 a barrel, Nigeria has already announced that it was cutting its price by $ 4 from $ 40 a barrel for its premium oil, and it is widely expected that Libya and Algeria will follow in Nigeria's steps. Japan in particular has been trying to bring pressure on its oil suppliers to lower the prices, and if Japan is successful pressure must develop on OPEC from all industrialised countries for reducing the price levels. Industrialised western countries have already reduced their consumption of oil, and in any case, non-communist world's dependence on OPEC oil has dropped from 60 per cent to less than 50 per cent. At the Geneva meeting Sheikh Ahmed Zaki Yamani, the Saudi Oil Minister, was reported to have drawn the attention of his colleagues to the recovery of the dollar and claimed that the correct price for the Arabian Light, the traditional "marker" oil, should be $ 28. But it is unlikely that Saudi Arabia, though unwilling to help in price rise, will contribute to bringing down the levels. If the glut gets accentuated, this may of course come about but OPEC has so far seen to it if that there is no reversal of the price trend.

Oil importing countries have been thus assured of some respite in prices but commentators have been quick to point out that politics proved mightier than economics for OPEC. For instance, the ruling Christian Democratic Party of Venezuela, a founder member of OPEC, was not prepared to give any impression of having succumbed to pressure at Geneva because of the political troubles that the party is facing at home on the eve of elections. The new secretary-general of OPEC, Nan Nguema of Gabon made the significant comment that "on an economic basis we found what looks like a good price but politically we could not agree". This is why it is difficult to predict how long the respite would be and whether Saudi Arabia's stand that prices should remain stabilised throughout the 1982 at $ 32 per barrel will continue to receive support or whether the OPEC's next ordinary conference scheduled for Abu Dhabi in December will change the picture. Writing in *Commerce* only last week the Minister for Petroleum, Mr P. C. Sethi, has expressed the feeling that, though at the OPEC meet in June a price freeze was announced, "the easy supply conditions may be a transient feature only, once the major exporters of crude oil start imposing production cuts to tighten the market conditions". It is presumably because of this assessment that India is not prepared to disturb the contracts with producing countries for supplies of oil, not even contracts with Nigeria and Libya which are charging a premium price. The Government's calculations are that, even with the accelerated programme of production of 30 million tonnes of crude oil by 1984-85, imports of crude oil and products as a percentage of total demand of petroleum products would still remain high at about 47 per cent even though it would have declined from the current level of about 70 per cent. India, on her own account, cannot influence OPEC as regards the price but it must hope that oil consumption in the industrialised countries will be curbed further and non-OPEC oil output increased so as to keep the oil price trend in check.

Setback for jute

By SARAT C. V. NARASIMHAM

THE Bangladesh jute industry, which had made rapid progress and reduced India to a secondary position in the world of jute market with its quality fibres and aggressive marketing policy, has suffered a setback in recent months. With the effective support of its government, the Bangladesh jute industry had made a remarkable progress within a very short period, increasing its market share in world trade in jute from 35 per cent in 1972-73 to nearly 48 per cent in 1978-79. Its planners hoped, according to the data available, to meet a little over 50 per cent of the world demand for the jute goods during the Second Five Year Plan period (1980-85); that is, to say the planners hoped to increase the production and export of raw jute from 60 lakhs to 65 lakh bales. It was estimated that 6.2 lakh tonnes of jute goods would be made available for exports in 1981-84 from the total production of 7.5 lakh tonnes against 4.6 lakh tonnes exported from 5.26 lakh tonnes produced in 1978-79. This compares with the total volume of 1.6 million tonnes of jute fibres and jute goods sold by producing countries in 1979-80 valued at $ 1.1 billion.

The picture, however, has changed since 1979-80 and the planners' calculations promise to go awry. The golden fibre of Bangladesh has, so to say, deteriorated to a great extent in 1980-81. The production targets of both raw jute and jute goods could not be reached and exports showed a downward curve. The Government has also failed to recover taka 215 crores (Rs 100 taka equivalent to Rs 49) sanctioned to jute merchants by the nationalised banks as loans for purchasing raw jute. Added to that cultivated area under raw jute came down to 18 lakh acres during the year compared to the preceding year's 19.16 lakh acres. As a natural corollary production of raw jute was not up to the mark. In the meanwhile the jute experts estimated production of raw jute at 6.11 lakh tonnes, which was, however, 5.80 lakh tonnes — far below their expectation. The government also fixed an export target at 5.30 lakh tonnes during the year, whereas the actual export demand was limited to about 5 lakh tonnes only.

Because of aggressive salesmanship shown by Bangladesh jute traders, the country exported 4.58 lakh tonnes of jute in 1978-79 and earned taka 419.90 crores. This was about 51.57 per cent of the total world export, while India showed an all time low figure during the same period. Many reasons were attributed for this decline such as shortage of inputs like power, coal, diesel, prolonged strikes in jute mills, continued trouble in Calcutta port etc. Owing to these factors, a spokesman of Indian Jute Mills Association (IJMA) explained, the total loss suffered by jute export trade was Rs 136.5 crores out of annual export valued at Rs 272 crores. Add to this, he continued, the introduction of export duty of Rs 1,000 per tonne on hessian goods which affected the outstanding contracts. This is of course the picture as depicted by Indian side during the corresponding period.

The plight of Indian jute in 1978-79 is being repeated in Bangladesh in 1980-81. It has exported 3.61 lakh tonnes of jute up to March 1981 which is 46.88 per cent of the total export of world market. According to Bangladesh sources, the private sector exporters handle nearly 90 per cent of exports of raw jute. The target of raw jute export has not been met during the last few seasons because of failures of the private sector traders to carry on their business due to serious fund constraints. It may be mentioned here that the Government of Bangladesh sanctioned about taka 300 crores last year to the jute traders in both public and private sectors of which about taka 220 crores remained to be recovered from them. It was stated that they could not repay the credit due to their failure to export superior quality of raw jute since the market arrivals were generally of inferior quality. Besides the quality of raw jute and cuttings, the carry-over from the preceding year stood at 33 lakh bales. Private jute traders reportedly had more than 15 lakh bales unsold stocks, while the balance has been piled up in the warehouses of Jute Trading Corporation and Bangladesh Marketing Corporation.

Out of 33 lakh bales of carry-over jute, more than 26 lakh bales are of very inferior quality which are neither in demand abroad nor in the local jute mills. Add to that, last year the Government constituted a buffer stock of 4.07 lakh bales of raw jute and cuttings under Bangladesh Jute Marketing Corporation, and another 2.27 lakh bales under the management of Jute Trading Corporation.

This year the farmers also did not take much interest in cultivating jute as the government failed to fix any minimum price for their products last year and some of the farmers chose alternative crops which could assure them easy and sure price. Besides, it was also stated that the government failed to distribute adequately high yielding seeds among the cultivators. The seeds supplied by the government were of very low quality. According to informed sources, in many places, one seer of jute seed was sold at taka 30 to 36 instead of taka 18 as fixed by the government. As a result, many of the farmers particularly in the districts of Mymensingh, Dacca and Comilla did not cultivate jute. The sources further said that in these districts the production of jute had fallen by 2 per cent compared to preceding year.

Bangladesh jute has been passing through a crisis as a result of governmen'ts non-fixation of minimum price. Subsequently last year raw jute prices in the country registered a sharp fall. The price of one maund of jute was sold at taka 129.92 in the month of July 1979, while it came down to only 79.20 per maund during the corresponding month of 1980. It, however, recovered to taka 118.71 in the month of March this year. Ironically, the same was selling at more than taka 186 per maund in the month of 1978!

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SPECIAL ARTICLES

What ails the Indian economy and polity?

By M. S. PATWARDHAN

A one sentence answer to this question might be that slow economic growth, a plethora of government controls, rapidly growing population and rising expectations which exceed available resources are the main causes of the prevailing malaise. Although it has a substratum of truth, this is a simplistic explanation at best. A better understanding of the problem and suggestions for possible remedies require a deeper examination.

What are the facts? Over the period from 1950 to 1980, India's GNP has grown at an annual compound rate of 3.6 per cent, which compares with 1.3 per cent over 1900 to 1950 (Source : *National Income of India: Trends and Structure* by M. Mukherjee). Industrial production has increased at the not unimpressive rate of 6.1 per cent per annum over the three decades from 1950. What is more, the range and sophistication of industrial output have grown enormously and compare well with the more advanced developing countries. India ranks as the tenth (according to some estimates, seventh) largest industrial power in the world.

A few years ago it was customary in international forums to suggest that India could never become self-sufficient in food and feed its teeming millions. With the green revolution, the picture has changed dramatically and India is now the fourth largest grain producer in the world. It has built a large inventory which means that one or possibly two consecutive droughts should not mean a serious famine of the proportions to which history had accustomed us.

The volume and range of exports have gone up taking the total to Rs 6,425 crores in 1979-80, as against Rs 601 crores in 1950-51. After over two decades of foreign exchange stringency, the reserves stand at over Rs 5,000 crores, a level which was almost inconceivable a decade ago. The savings rate has gone up from 6.8 per cent of the national income in 1950-51 to 23.5 per cent of GNP in 1979-80.

Life expectancy has increased from 33 in 1941-50 to 53 years in 1976-80. Literacy has gone up correspondingly from 17 per cent in 1951 to 30 per cent by 1971. India now has the third largest pool of scientists and engineers, next only to the USA and USSR. Very impressive advances have been made in the technical fields of nuclear energy and space research. These achievements are clearly impressive. What then accounts for a feeling of failure and disillusionment? Is it a perverse travesty of the facts engineered by devious politicians and by India's detractors? The main explanation lies in :

(i) the rapid growth of population;

(ii) a comparison of our performance with the underlying potential and with the achievements of other developing countries; and

(iii) rising expectations which have kept a step or two ahead of our performance.

Growing population

The population has grown from 358 million in 1950-51 to over 684 million by 1981. The annual compound growth rate in population of over 2 per cent has largely eroded the per capita growth in GNP to 1.4 per cent per annum over 1950-80. Despite impressive economic growth in absolute terms, nearly half of India's population remains below the poverty line as defined by a modest per capita monthly expenditure of Rs 65 in rural and Rs 75 in urban areas at 1977-78 prices. Although grain production has gone up impressively, it is a measure of the country's failure that the poor are unable to buy the grain necessary to take them above the poverty line defined in terms of calorific intake; very limited progress has, however, been made with Food for Work as a means of ameliorating rural poverty.

The availability of natural, human and other resources in India, the genius of the people and the size of the pool of engineers and scientists which is the envy of many developing countries together imply that with better organisation and leadership, it should have been possible for us to achieve higher economic growth rates in line with those of South Korea, Taiwan, Malaysia, Brazil, etc. The problem of rising expectations has been referred to later in this paper.

Why did this economic advance not come about? Apart from the failure to control the growth in population, it is significant that in most of the countries cited above for comparison, greater recourse to the market mechanism, as opposed to a more dirigiate approach on the Indian pattern, has been adopted. Emphasis on heavy industry in the Mahalanobis era, comparatively less importance to agriculture and wage-goods manufacture till recently, reliance on controls, licences and permits, doctrinaire insistence on the public sector as the main instrument of industrial and economic development, high levels of taxation together with unrealistic controls which have led to a thriving parallel economy are some of the reasons why our performance compares unfavourably with some other countries. It is true that our limited achievements have been brought about within a democratic political framework, while most of the countries which have outperformed us in the developing world have done so in less democratic environments. This is a fact we can be proud of but it does not lessen the frustrations and disillusionment attributable to poor economic performance. Indeed in a democratic set-up, the expression of this disenchantment will obviously be more manifest, particularly so in the light of expectations built up on the heady diet of populist slogans.

Are we then condemned forever to a policy-mix which brings neither economic growth nor social justice with the inevitable consequence of societal collapse? What are the main impediments to achieving faster economic growth in the near future without which we cannot hope to make progress towards social justice? The following thoughts might help to focus attention on the bottlenecks and to suggest possible solutions.

Three major constraints

The country now faces three major categories of constraints—physical, financial and societal. They are interdependent and have some overlap among them. The first two, the physical and the financial constraints, are relatively simple to understand, analyse and deal with. However, societal constraints, to the extent they depend on human psychology and attitudes are much less comprehensible and more difficult to cope with.

Physical constraints: What are the physical constraints ? An obvious example is the shortage of infrastructure. In

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Mr Patwardhan, managing director of NOCIL, is a former president of the Bombay Chamber of Commerce and Industry.

the short term, that is in the next year or two, the only way the industrial sector can advance is through elimination of infrastructural bottlenecks. In some ways this represents a plus point in that if industry had been working at full capacity, further industrial growth would have been impossible in the short run since it takes considerable time to establish fresh capacity. However, we have plenty of idle capacity and not all of it is being put to use as a result of shortages of coal, electricity and transportation.

What should be industry's response in these circumstances? We should, of course, conserve energy. But more than that, we need to appreciate and consider the challenges we face in increasing coal production from about 100 million tonnes now to over 400 million tonnes a year by the end of the century, and in increasing power generating capacity from 30,000 mw to more than 110,000 mw during the same period. These tasks are stupendous and there is no way in which the public sector, with the best of management and the best will in the world, can fulfil them. Indeed there is no alternative to the private sector playing a complimentary role in achieving these targets. How can the Government be persuaded to accept this reality? This is a subject to which the leaders of private industry should address themselves.

Paralysis by analysis: The next class of constraints we should recognise relates to the paralysis in decision making; although the constraint is not in itself physical, its repercussions delay physical action. Somebody has described this as paralysis by analysis and deferment by committee. We also have bureaucratic and procedural bottlenecks, which are a serious impediment to industrial and economic growth. Decision-making is slow and when decisions have been taken the follow-through is lacking. Two consequences follow. The first is very serious cost escalation. There was a news report a few months ago that the delay in deciding on the two Gujarat and Maharashtra fertiliser plants has cost India some Rs 400 crores already. With every year that passes, prevailing inflation leads to a severe penalty in the form of project cost escalation of 15 to 20 per cent per annum with its inevitable impact on the capital-output ratio.

Lost opportunities: An even more serious consequence is the lost opportunity. A good example is the delay in the exploitation of the Bombay High gas and the national loss it has given rise to. Whether or not to have a petrochemical complex, whether to have one in Gujarat and one in Maharashtra, of what size it should be, where it should be located, should it be in the public sector, private sector or joint sector—these decisions are eluding us for too long. In the meantime, we are willy-nilly accepting that some of the gas, which will inevitably be produced along with crude oil will be consumed in an uneconomic way. This example highlights the adverse impact of decision-making delays.

Financial constraints

Among the second category of constraints, namely financial, the foreign exchange crisis tops the list. The true dimensions of the oil squeeze and the intolerable burdens it will cast on our resources in the coming years have not yet been fully grasped. The Iran-Iraq hostilities as a result of which three-fourths of our crude supply has been cut off in the short term gives us a foretaste of potential threats, to our economy from 'accidents' of this type. It is apparent that we are going to find it increasingly difficult to import our oil needs in the years ahead. This highlights the importance of conserving energy and finding our own oil. The recent decision of the Government to attract foreign oil companies to supplement our own efforts is welcome in this respect; it is also necessary to recognise that it will be necessary for us to offer terms which are competitive internationally taking account of geological prospects. But this initiative will not be enough and we need to do a great deal more to expand the range and volume of our exports.

Capital-output ratio: The second financial constraint that causes concern is the rising capital output ratio. What can we do about it? Should we change our economic, industrial and planning priorities by concentrating even more on agriculture, agro-based industries and wage goods manufacture? These are usually less capital-intensive, have shorter gestation periods, generate considerable employment opportunities and can help step up exports. If we were to increase our production of wheat, rice and sugar by a million tonnes each and of cotton by a million bales, we could generate more than Rs 100 crores to Rs 200 crores per annum of exports in respect of each item. We should seriously consider restructuring our priorities—in any case, such a step is shortly going to be forced on us by the shortages of capital and foreign exchange.

Difficulties in resources mobilisation: A third financial constraint relates to the problem of resource mobilisation. The nationalised banks, life insurance, general insurance and the Unit Trust are owned and controlled by the Government. People's savings in the form of CDS or provident and superannuation funds are statutorily required to be invested in government securities. In addition, we have high levels of taxation and high rates of inflation, which together mean that that the urban middle class sector has lesser savings available for investment, particularly in equity. Official statistics show high domestic savings. Where they go is not obvious. Perhaps they find their way into the parallel economy or into gold, property and high interest-bearing company deposits. Obviously, hard-earned personal savings would not go into the corporate sector, where returns are poor as a result of constraints on capacity growth in the larger companies, licensing, pricing and taxation policies as well as infrastructural bottlenecks.

So long as the available resources are largely with government agencies and the private corporate sector's access to domestic savings is limited by a whole range of restrictive policies, there is a real problem for the corporate sector to raise equity funds particularly when prevailing rates of interest on company deposits and elsewhere are higher. We have to consider these questions not from a sectional point of view but from that of the country. How can we attract private savings to the corporate equity sector? Pending urgently needed structural changes in respect of administered prices, taxation and licensing policies, 'free' depreciation for fiscal purposes, tax relief on stock profits broadly on the UK pattern and greater recourse to public deposits might improve the private sectors' cash resources for investment and growth.

Government shareholding in private companies: Another possible solution is to re-examine the structure of our corporate sector. If we leave out the FERA companies, the majority of the larger companies in India have a public sector share-holding of somewhere between 10 and 30 per cent. There are even companies like TISCO where the government or public sector shareholding is more than 40 per cent. With prevailing fiscal and economic policies and the pre-emption of a great deal of finance in the public sector described earlier, these percentages are going to rise in the future. This really means that the distinction between the private and the joint sector, if not the public sector, is blurring with time. Many of the corporate bodies which have been looked upon as private sector companies are in reality joint sector companies. They have government nominees on their boards of directors. An institution like TISCO, for example, is essentially a government company although the government has wisely left it to be managed by the private sector. A comparison of TISCO's performance with the high capital-output ratio or low return on investment of the public sector undertakings and steel plants in particular shows the advantages of the former pattern.

It is not suggested that the best managers in the public sector are less efficient than the best managers in the private sector. The fact is, however. that with bureaucratic control, ministerial interference and parliamentary intervention, there is no way that the best managers, whether from the private or the public sector, would be able to produce the sort of results that the country has the right to expect from the national investment in public sector industry. The real challenge is to combine the resources in the public sector and the autonomy and management culture of the private sector without the strait-jacket of governmental regulation. If we can bring this about by separating ownership from management, we can find some way of increasing our industrial output as well as reducing the capital-output ratio.

Societal constraints

The question of societal constraints is perhaps even more important than the other two constraints mentioned earlier. We are passing through a period of instability, agitation and unrest. Owing to years of poor economic growth, massive educated urban unemployment and inflation, societal pressures have reached formidable proportions. Widespread education, the extensive reach of the media and the demonstrative effects of TV and the cinema have led to rising expectations to the point of an aspiration explosion. This is a highly explosive mixture and the result may be perceived in the shape of troubles in Assam, farmers' stir, students' agitations. and strikes and lockouts in industrial establishments. Bandhs are taking place every other day, the law and order situation is deteriorating and every pressure group is involved in agitating to improve its relative position. These agitations have triggered off serious consequences because our economy has become so complex that there is a great deal of interdependence. A small group, say, power station workers can hold the whole community to ransom by withholding their labour, going slow or even committing sabotage. Agitational methods have become self-perpetuating because almost every agitation is succeeding. All one has to do is to agitate and one's demand is conceded.

Industry response

What should be industry's responsibility? Should industry spend its time on creating more employment for the urban educated? Should it engage in slum relief operations? Should it spend more time and money on pollution abatement than the minimum standards specified by law? What is its responsibility for increasing employment in the rural areas? Should it take up projects for rural development? How should these activities be reconciled with corporate goals and return on investment objectives, particularly in the context of industry's low profitability and the plethora of constraints it operates under? Does it have the power, ability and will to do so? These are some of the issues we have to find answers to if we are to survive.

Conceptually all these problems have two dimensions. There is a technical dimension and a human one. As a society and as a country we usually have solutions on the technical plane. The problems are understood intellectually, the solutions are known but we lack the necessary will and leadership to implement them. We have somehow to find a way of strengthening our skills and motivational efforts in dealing with the human dimension. Without such a step, the nation's productive processes will continue to suffer and so will the country's economic growth, progress towards greater social justice and indeed the prospects of survival as an orderly, healthy and civilised society.

I AM MINTY
A SQUIRREL TINY

Thrifty, nifty, sprightly
I helped Prince Rama
cross the sea.
Got a pat on the back
for all to see.
Others eminent
still bless me.
Even at Mahabank
- yes, that's me.

Once a denizen of
parks and trees
I live on branches
that grow with me.
Hundreds of
Mahabank branches
now and more to be.

Bank of
Maharashtra
(A Government of India Undertaking)
H.O. Lokmangal, Shivajinagar, PUNE : 411005.

R.A.ADVTG.
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Gold and silver price maze

From OUR SPECIAL CORRESPONDENT

BOMBAY

ON August 19, the prices of gold and silver recorded sharp increases in the Bombay market. The price of gold rose by Rs 38 to 1,775 per 10 gm and that of silver by Rs 40 to Rs 2,790 per kg. The sudden rise in the prices of these precious metals was caused by paucity of supplies.

While silver was reportedly being diverted to Gujarat, the seizure of gold in recent weeks aided the bullish trend, with the unofficial price of gold biscuits of 10 tolas going up from Rs 18,700 to Rs 20,400. On August 22, the closing prices of gold and silver in the Bombay market were Rs 1,745 per 10 gm and Rs 2,765 per kg respectively.

In the London market too, the price of gold rose sharply on August 19. After opening at $ 429.50 per ounce, it rose to $438 on the news of the US shooting down two Libyan planes. At $431.50, the closing price of gold in the London market represented a gain of $14 over one week. There was a gain of almost $40 in two weeks but on August 25 the London price retreated to $ 419.50 with the dollar showing a recovery.

For quite some time now, prices of gold and silver, both in India and abroad, have been exhibiting sizable fluctuations. In the last days of 1979 and the first few days of 1980, the Bombay market had witnessed skyrocketing silver prices. Silver had opened in the Bombay market at Rs 4,000 per kg on January 1, 1980, which represented a jump of Rs 558 over the closing price of Rs 3,442 on December 31, 1979. On January 1, 1980, silver had closed at Rs 4,108. In the first week of January 1980, the price continued to rise till January 9, when the closing price was Rs 4,933. However, soon after that the price started declining and the closing price of January 1980 was Rs 3,225. The lowest silver price of 1980 was reached on May 19, 1980 when the price was Rs 2,075. The year 1980 had closed at Rs 2,825.

Silver had resumed in 1981 at Rs 2,845 per kg and initially the prices rose and reached the level of Rs 2,855 on January 6, 1981. However, the prices then drifted to a low level of Rs 2,320 on July 8, 1981 but rose again to Rs 2,790 on August 19, 1981. It may be noted that notwithstanding these ups and downs, prices of silver in the Bombay market in the middle of August 1981 were lower than their levels in the beginning of 1981.

In the London market, silver price had reached a peak of 829.45 pence per ounce on November 28, 1979. By March 28, 1980, the price had come down to 644.70 pence. On March 26, 1981, the silver price in the London market at 499.5 pence marked the lowest level in a year. On August 19, 1981, the price of silver on the London market was 531 pence per ounce.

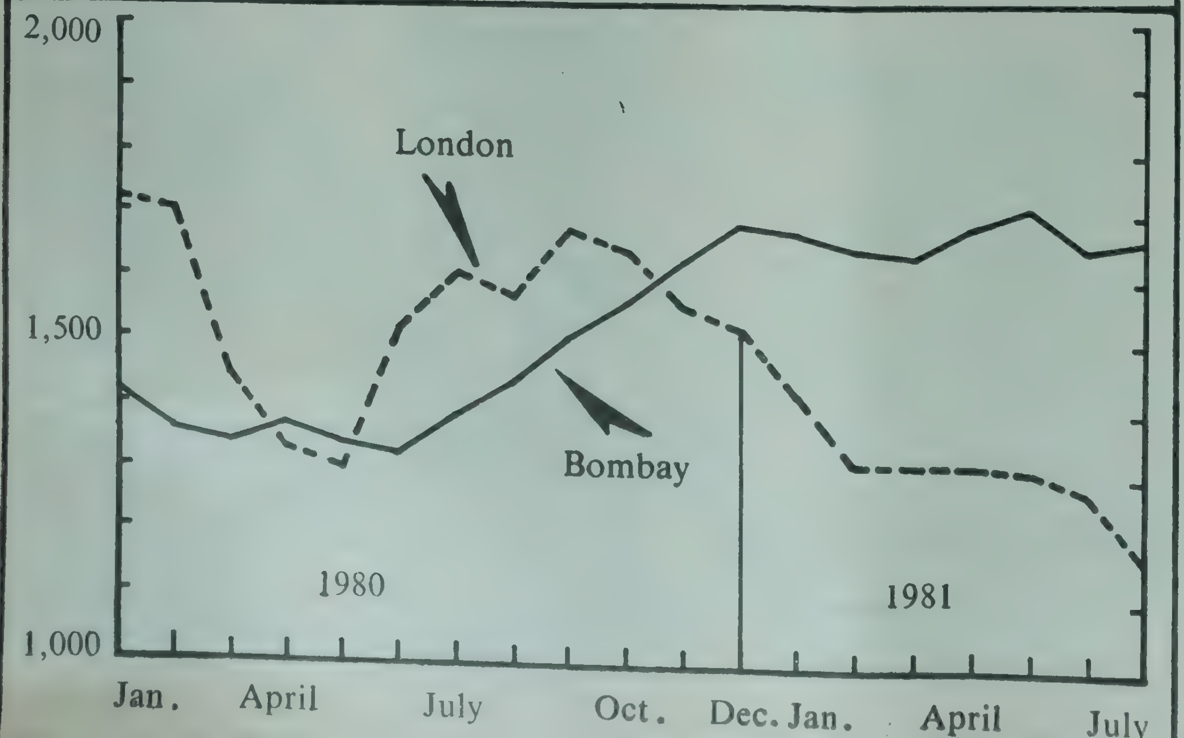
Gold had resumed this year in the Bombay market at Rs 1,695 per 10 gm but dropped to a low of Rs 1,590 on March 12, 1981. Prices firmed up on

Average closing prices of gold in Bombay and London markets

(Rs per 10 gm)

Year/month	Bombay		London		Price difference	
	Price	Percentage variation	Price	Percentage variation	Rs. (London-Bombay).	Per cent (London-Bombay) Bombay
1980						
January	1,421	—	1,722	—	301	21.2
February	1,362	—4.2	1,705	—1.0	343	25.2
March	1,349	—1.0	1,445	—15.2	96	7.1
April	1,379	+2.2	1,340	—7.3	—39	—2.8
May	1,345	—2.5	1,308	—2.4	—37	—2.8
June	1,333	—0.9	1,520	+16.2	187	14.0
July	1,395	+4.7	1,608	+5.8	213	15 3
August	1,441	+3.3	1,572	—2.2	131	9.1
September	1,506	+4.5	1,679	+6.8	173	11.5
October	1,565	+3.9	1,647	—1.9	82	5.2
November	1,629	+4.1	1,562	—5.2	—67	—4.1
December	1,693	+3.9	1,524	—2.4	—169	—10.0
1981						
January	1,681	—0.7	1,425	—6.5	—256	—15.2
February	1,655	—1.5	1,318	—7.5	—337	—20.4
March	1,641	—0.8	1,320	+0.2	—321	—20.0
April	1,686	+2.7	1·319	—0.1	—367	—21.8
May	1,715	+1.7	1,312	—0.5	—403	—23.5
June	1,651	—3.7	1,283	—2.2	—368	—22.3
July	1,667	+1.0	1,174	—8.5	—493	—29.6

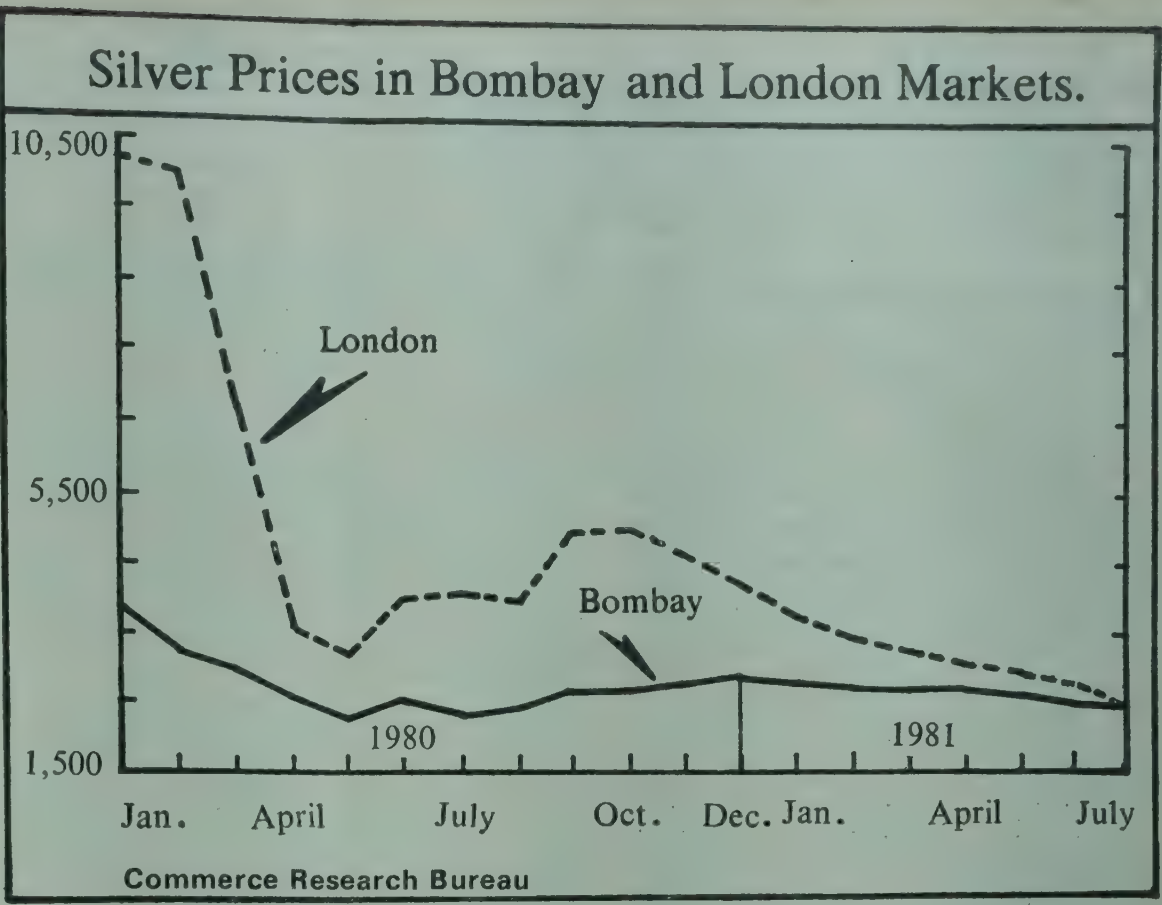
Gold Prices in Bombay and London Markets.



were lower than their level at the beginning of 1981, gold prices touched a new peak on August 19, 1981 at Rs 1,775.

In the international markets, gold prices had touched the peak of $850 an ounce in January 1980. However, by the first week of August 1981, the prices had crashed through the psychologically important level of $400. On August 4, 1981, the closing price of gold was $392—a fall of $14 over the previous week. Besides, it was only the second time that the price of gold had fallen below the $400 level, the first instance having been witnessed on July 8, 1981. The closing price of gold on August 4, 1981 was less than half of that in January 1980.

The growing strength of the American dollar was the main reason for the fall in gold prices. During the first week of August 1981, the US dollar had moved up to its highest level for three years against sterling, for five years against the deutschemark and for 23 years against the French franc.


Silver Prices in Bombay and London Markets.

Commerce Research Bureau

The growing strength of the US dollar had also its effect on silver prices. But there was no further fall even though the US Congress approved in July 1981 the sale of 105 million ounces of silver between 1982 and 1984—46.5 million ounces in 1982, 44.7 million ounces in 1983 and 13.8 million ounces in 1984. This approval was subject to the stipulation that the sales cannot be made if they disrupt the market, and that the quantity which is not sold in the stipulated year must be returned to the Government stockpile. In view of the already falling prices of silver, the market expectations were that the stipulations cannot be fulfilled, and hence there were doubts about the implementation of the plan.

Traditionally, the silver price in the London market has been higher than that in the Bombay market. In the year beginning with July 1, 1980, the highest difference was reached on September 22, 1980 when the London price of silver was higher by Rs 3,132 per kg than the Bombay market. Nevertheless, since September 1980, the price difference has been narrowing down. In fact, on July 27, 1981, the trend was reversed and the Bombay price of silver at Rs 2,520 a kg was Rs 88 higher than the London price of Rs 2,432. In July 1981, the average difference was only 0.5 per cent.

Average closing prices of silver in Bombay and London markets

(Rs per kg)

Year/month	Bombay Price	Bombay Percentage variation	London Price	London Percentage variation	Price difference Rs (London-Bombay)	Price difference Per cent (London-Bombay) / Bombay
1980						
January	3,879	—	10,151	—	6.272	161 7
February	3,2[illegible]	−15 4	9 099	−10 4	5,818	177.3
March	2 976	−9.3	6,667	−26.7	3,691	124.0
April	2,557	−14.1	3,546	−46.8	989	38.7
May	2,298	−10.1	3.208	−9.5	910	39 6
June	2,572	+11 9	3 973	+23 8	1,401	54 5
July	2,322	−9 7	4,079	+2 7	1,757	75 7
August	2,406	+3 6	3,987	−2 3	1,581	65 7
September	2,629	+9 3	4,951	−24 2	2,322	88 3
October	2,688	+2 2	5,004	+1 1	2,316	86 2
November	2,763	+2 8	4,657	−6.9	1,894	68.5
December	2,852	+3.2	4,214	−9.5	1,362	47.8
1981						
January	2,789	−2.2	3.767	−10.6	978	35.1
February	2,705	−3.0	3,469	−7.9	764	28.2
March	2,667	−1.4	3,247	−6.4	580	21.7
April	2,664	−0.1	3,077	−5.2	413	15.5
May	2,604	−2.3	2,939	−4.5	335	12 9
June	2,496	−4.1	2,799	−4.1	303	12.1
July	2,451	−1.8	2,463	−12.0	12	0.5

Though export of silver from India has been banned with effect from February 20, 1979, unauthorised exports of this metal have reportedly taken place on a large scale in 1980. According to the estimates made by Messrs Handy and Harmon of USA, 25.7 million ounces of silver had been exported from India in 1980 which was 11.2 million ounces higher than that in 1979. It is also pertinent to note here that the quantity of silver seized by the customs authorities all over India while being attempted to be smuggled out of the country was the highest in 1980— 30,390 kg as compared with 5,396 kg in 1979 and 598 kg in 1978. In the first two months of 1981, 2,582 kg of silver were seized. It is obvious that such large exports of silver could not have taken place but for a sizable difference in the prices between the London and Bombay markets. The average difference between the prices in the London and the Bombay markets during 1980 was as high as 85.7 per cent. However, in 1981, the price difference has come down and was only 18.0 per cent in the first seven months of the year.

As far as gold is concerned, its price had been higher in the Bombay market than in the London market, till the end of 1979. However, beginning with 1980, the situation was reversed and the London price of gold became higher than that in the Bombay market. With a few exceptions, this position continued till October 1980. Beginning with November 1980, the situation again reversed itself,

Continued on page 430

COVER STORY

Emergence of financial managers

By Y. C. SHARMA

GONE are the days, when companies used to float their capital issues with the help of a team of brokers under the leadership of one managing broker and the collecting bankers. Now every public issue must have name of at least one reputed bank or financial consultancy firm for the job of the manager of issue. Further, there is an impressive array of other specialised agencies to look after various aspects of capital issues of the companies. This change in the style of capital issue has no doubt been necessitated by a number of new factors which have emerged in the economy of the country. With fast industrialisation, and development of entirely new types of sophisticated industries requiring huge capital, the capital issue work was bound to become more and more specialised, creating a distinct place for the financial consultancy institutions which could manage the issues with proficiency, and success. Merchant banking (MB) provides the package of services to take care of all matters pertaining to the capital issue, legal, financial commercial, and secretarial.

Growth in India

Merchant banking was born in 19th century in UK, and slowly and gradually it developed into a powerful instrument of providing institutional finance to the needy companies and firms. It is in its infancy in India even late in the 20th century. It is quite natural because the industrial expansion picked-up speed only after Independence. Grindlays Bank was the first bank to start merchant banking in an organised and systematic manner in India in 1969. The then chairman of the Grindlays Bank, who had purchased one of the important merchant banks of UK, "Brandts", perceived the great potentiality of merchant banking in India in the context of fast changing economic scene after independence.

Many foreign companies operating in India were keen upon Indian participation in their capital, and Grindlays Bank with its merchant banking division could help them to achieve this objective easily with the rich experience in merchant banking of its associate, Grindlays Brandts of London. The bank as a member of "Accepting Houses Committee" could also exercise its influence in obtaining foreign loans for the Indian companies. It could also manage to arrange British Government export credit for the Indian companies, and provide expertise to secure Euro-currency loans.

Some other foreign banks like Citibank and Chartered Bank followed the suit in starting merchant banking activities in India. The Mercantile Bank, which started its merchant banking division in 1978, also had the advantage of arranging foreign currency loans for the Indian companies without much difficulty, because of its close relationship with the powerful Hongkong Bank group.

The Banking Commission made a strong recommendation for starting merchant banking institutions in Bombay, Calcutta, Madras and New Delhi. However, instead of starting separate merchant banks, the State of Bank of India, the biggest and oldest among the commercial banks of this country, took the lead in starting merchant banking division in 1972. It was closely followed by the Industrial Credit & Investment Corporation of India, the premier financial institution in the field of corporate finance, which started its organised merchant banking activities in 1973. Other Indian banks such as Bank of India, Central Bank of India, emulated the example of State Bank of India in the next six years, and about half a dozen more nationalised banks e.g. Indian Overseas Bank, United Commercial Bank, Punjab National Bank, etc are also reported to be taking steps to start merchant banking divisions of their own.

Role of stock-brokers

The stock and share-brokers in India, particularly at Bombay, have also been playing an important role in public issues of the companies, and some of the old and well-established broker-firms used to work as the "managing brokers" of these public issues. They were also doing under-writing business. Some of the leading broker-firms of Bombay were quick to see the great scope for the merchant banking business of India. They decided to develop their new professional image of specialised and competent financial consultants, different from the usual image of stock brokers as some sort of intermediaries. One by one, four leading broker firms of Bombay set up separate financial consultancy firms in order to exclusively cater to the financial requirements of the client companies. The setting up of separate financial consultancy firms also enabled them to carry on their new business in a congenial environment without any hindrance or restrictions.

In this context it may be pointed out that as members of the stock exchange, the broker-firms are, as a part of business ethics, barred from doing any publicity for themselves, and this naturally restricted their activities, which were sought to be widened in the context of growing specialisation in the field of financial consultancy. HL Financial Consultants and Management Services Pvt. Ltd. (FICOM) floated by the well-known broking-firm, Harkisondass Lukhmidass, was the first to enter the field of merchant banking in 1973. Almost simultaneously J.M. Financial and Investment Consultancy Services Pvt. Ltd. was floated by another wel-known broker firm Jamnadas Morarji. Later on, DSP Financial Consultants Ltd. and Champaklal Investment and Financial Consultancy Ltd. (CIFCO) also came into the field under the sponsorship of D. S. Prabhoodas, and Bhupendra Champaklal Devidas respectively. The latter two financial consultancy (FC) companies are regular public limited companies, while the other two are private limited companies. Apart from these better known FC. companies, a number of share-broker firms are also running their respective financial consultancy units.

The merchant banking divisions of the commercial banks financial institutions, apart from their goodwill and prestige, enjoy distinct advantage of having access to bank's funds, which could be lent to their clients, and also the ability to ensure underwriting of capital issues by the banks. However, the financial consultancy companies, which are the offshoots of the reputed share-broking firms, also enjoy the special advantage of having a very close rapport with the market through their associate share-broker firms and getting the issues

SEP 1981

underwritten by them, as well as enjoying the confidence of the client companies and investing public alike. However, these advantages cannot be the exclusive basis to secure business from the clients, and the quality of service rendered, capabilities and attitude of their respective executives, as well as the results achieved also play equally important role in developing the individual image of the merchant banking divisions of the banks and financial consultancy companies.

Concentration in western region

It may be observed that at present there is concentration of merchant banking activities in the western region of India, with main offices of the merchant banking divisions of banks and the financial consulting companies in Bombay only. The obvious reason for this development is that the head-offices of most of the commercial banks and other financial institutions such as ICICI, LIC, UTI and IFCI and IDBI etc, playing crucial role in providing term-loans, underwriting services, and even subscribing to the capital issues, are in Bombay only, and it facilitates the merchant banking banks/companies to attend to various matters more expeditiously and promptly through personal contacts with the officials, who are in a position to take final decisions. Moreover, Bombay is the most affluent metropolitan city of India, where the largest investible funds are available. The location of the head-offices of the MB divisions of banks and FC companies in Bombay enables them to carry on their campaigns more intensively in this city.

However, slowly and gradually some financial consultancy firms are coming up in places like Delhi, Calcutta, Madras, Ahmedabad Hyderabad and Bangalore also. The growing importance of these cities from merchant banking angle is being realised by the banks and FC companies as well. The State Bank of India has established six bureaus in Bombay, Delhi, Calcutta, Madras, Ahmedabad and Hyderabad as the extended arms of its merchant banking division to tap the local business and do some sort of spade work for the head office. Similarly, the Grindlays Bank has also its branches in Delhi, Calcutta, and Madras (proposed). FC companies are also not lagging behind, and FICOM, JM Financial Consultants and DSP Financial Consultants are also having their branch offices in a number of big cities of India, though these offices at present are concentrating mainly on collecting fixed deposits for the client companies.

Services rendered

There are a number of services, which MB divisions of banks, and FC companies aim at rendering *e.g.* capital issue management, tying of financial accommodation, and syndication of loans, in local currency as well as foreign currencies, Indianisation of FERA companies through dilution of foreign shareholders, corporate counselling including restructuring of capital, project planning, liaison with government and semi-government bodies as well as the financial institutions, management of fixed deposits, and portfolio-management, etc. However, as the sophisticated MB activities are yet to take roots in India, capital issue management, credit syndication and underwriting work, predominate at present so far as merchant banking divisions of the banks are concerned, while FC companies are paying maximum attention to the collection of fixed deposits for the client companies along with the management of capital issues, loans syndication, and underwriting business.

Two FC companies have also successfully organised portfolio management services for the individual investors. *FICOM* and some other FC companies are publishing monthly magazines for tendering advice to their clients regarding investment. The MB divisions of banks and companies have to keep themselves abreast with the latest market trends in the fields of finance, economics and politics in various countries particularly India, the latest government policies affecting economy, and the mood of the investing public, in order to render timely and efficient services.

Under merchant banking some sort of personalised services are required to be rendered to the client companies, and a confidence has got to be created in their mind about the competence of the MB divisions/FC companies to deal with the intricate financial matters, as well as their capability to protect the client's interests. This totally reverses the role of the commercial banks, which are used to adopt the lender's attitude of superiority. In the course of carrying on merchant banking activities, the officers do no more represent their respective banks but their clients, and they have to invariably plead the case of the clients with the financial institutions, for funds and other services. The main objective of MB is to render financial consultancy and management services in a better, quicker, manner cutting time to the minimum, and thereby saving money and botheration for the client.

The range of services rendered by the MB divisions of banks and FC companies differ from client to client. While some of the client-companies entrust the entire responsibility, right from the stage of project formulation to the management of capital issue, some others approach them only for the issue management utilising the services of outside financial consultants for preparing the project profiles. Some of the big industrial houses have their own arrangements for project planning and financial tie-ups, and they also approach MB divisions/companies for the purpose of issue management only.

Organisational set-up

In order to render various consultancy and management services to the entire satisfaction of the clients, the MB divisions of banks and FC companies have to employ an impressive team of experts in various fields of knowledge, particularly financial management, corporate finance and accounts, and company law. These officers are highly qualified and experienced persons, with proper attitudes, capable of tactfully dealing with well-informed and experienced company executives, and convincing them of the merits of the point of view of the former. The teams include the company secretaries, MBAs; CAs, cost accountants etc specialist in company law and secretarial practice, banking, cost accounting, corporate finance, and marketing etc. Sometimes even the engineering experts are appointed by the MB divisions/FC companies to advise on technical matters. The MB divisions of various banks as well as the FC companies were reported to be having as many as 4 to 18 expert executives looking after a number of specialised jobs pertaining to merchant banking. In the banks, the officers selected for MB division were not only experienced in various aspects of commercial banking but also well oriented and trained in MB. Already certain short-term courses of 6 to 10 days' duration are being organised by the Reserve Bank of India, some of the nationalised banks, as well as some management institutes for the benefit

COVER STORY

any fear of exaggeration that they have fulfilled their objective during the short period of their existence in more than one way. They have been rendering effective professional advice, and managing capital issues successfully year after. The MB/FC concerns have been in a position to cut short the time required for the project planning, loan syndication, and capital issue etc resulting in substantial economy, and convenience to the client companies. Their advice regarding scientific structuring of capital of the client companies, and maintaining optimum debt equity ratio, have helped the client companies to increase their profitability through optimum use of different types of capital. The imaginative publicity, planned and executed under the guidance of MB divisions/FC companies, has resulted in creating a very favourable climate for investment, unknown is the past. One of the reasons for over-subscription of most of the public issues is certainly the well-conceived strategies and pragmatic approach followed in implementing the plans pertaining to various capital issues. It may be of interest to mention that the public issue of Hindustan Development Corporation debentures managed by the Grindlays Bank created a history in the field of capital issue by getting the issue over-subscribed 72 times, despite the fact that initially the company was little known in the Bombay circles.

The MB/FC concerns have played a positive role in creating a new awareness amongst the middle-class investors, and persuading them to invest their surplus money in profitable avenues, such as non-convertible or convertible debentures, equity shares, and fixed deposits. As a result of this the ownership of equity capital of many companies has been made much more broad-based.

It will be worthwhile to highlight a few salient features pertaining to the recent public issue of equity shares of the Gujarat Narmada Valley Fertilisers Co Ltd, which was managed by as many as five financial institutions and FC companies under the leadership of Industrial Credit and Investment Corporation of India Ltd. This was the largest ever (nearly Rs 43.60 crores) equity issue in India. It was a matter of great challenge to the managers of the issue to make a success of this public issue, despite some of the adverse circumstances, particularly the unfavourable image of many fertiliser companies in India resulting from their recurring losses year after year. Further, it was entirely a new company without any history or background, and investors had to take decision only on the basis of their estimate of economic viability of the company's project. But all the managers of GNVF's public issue did a commendable job as a harmonious team, and it is creditable that despite the capital issue being very big, it was over-subscribed 4.1 times.

For the first time an organised and concerted effort was made by the Bank of Baroda to mobilise the rural savings in a big way for the equity capital of this company, and it is indeed remarkable that from Gujarat alone, where Bank of Baroda has a network of rural branches, as much as Rs 12 crores could be collected by way of application money, while from rural areas of other states further Rs one crore were collected. Again, mainly due to efforts of Bank of Baroda and SBI; collection from the non-resident Indians working abroad by way of application money for GNVF Co's shares was also very sizable, amounting to Rs 9.6 crores. Particularly, Indians working in West Asia were approached through the foreign branches of the banks and were persuaded to apply for the equity capital of GNVF Co. It may be recalled that once earlier also, in case of the public issue of convertible bonds of TELCO, there was appreciable non-resident Indians' participation.

It is obvious that the awareness about the useful role, MB plays in the context of vast industrial expansion of India by offering complete package of financial services, is increasing fast in the corporate sector, and more and more nationalised banks as well as FC firms are coming forward to participate in the expanding merchant banking business. At present, all the well established FC companies seem to be doing roaring business, and there is no dearth of work for them. Though there seems to be sufficient scope for fuller utilisation of the merchant banking facilities created by the nationalised banks, the future of the merchant banking business seems to be quite assured in view of the fact that present government policy aims at encouraging the corporate sector to depend more and more on the funds raised from public, rather than from the financial institutions.

Further, the process of Indianisation of the FERA companies is still on, and these companies are quite likely to utilise the services of the MB/FC concerns to expedite the process in order to conform to the requirements of law in this regard. However, with the passage of time, there would probably be more and more sophistication in the instruments of raising capital from the public. Already, a sea change seems to have taken place in this regard, as proved by the popularity of convertible debentures. Perhaps, the future demands of the capital market will encourage the MB divisions/FC concerns to devise more and more innovations for attracting and satisfying the investors. It will be good not only for the investing public, but also for the country, that MB/FC concerns provide healthy investment counselling, and persuade them to channelise the surplus funds for the benefit of country's economy. In this context, more consultancy services regarding portfolio management by MB/FC concerns, as recommended by the Banking Commission also, will go a long way to encourage the investors to participate in corporate finance more and more. The work of investment counselling could be very usefully organised for the benefit of lakhs of non-resident Indians too, to channelise their precious foreign exchange savings worth thousands of crores of rupees. There is also great scope for tapping the surplus financial resources of rural areas and divert them to the industrial activities of this country. This could easily be done by actively involving thousands of branches of banks in rural areas for distribution of application forms and prospectuses of companies, entering the capital market.

There seems to be a very good scope for the Indian companies to start joint ventures abroad, particularly in the developing countries. The MB/FC concerns can play a very useful role not only in preparing the project profiles for the joint ventures, but also in arranging rupee and foreign currency tie-ups for the client companies. There would be ever increasing demand for merchant banking services of the Indian banks and FC companies within the country too, in view of the expansion/renovation programme of the existing units, and also starting of new types of sophisticated industries in India. There is immense scope for corporate counselling also for mergers and amalgamation etc. However, it would be worthwhile to develop some sort of business code for MB concerns, and to strive for co-ordination amongst them from the present nascent stage of merchant bank-

Continued on page 480

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No need for electoral reforms?

By ARVIND BHANDARI

RECENT parliamentary proceedings induce some thoughts. One of these is the puerileness of the convention that the opposition has to be opposed and that, therefore, any motion emanating from the other side of the House must be thrown out lock, stock and barrel irrespective of its intrinsic merit. Such a governmental posture indicates lack of self-assurance or just plain mindlessness. Can any observer of the Indian scene even for a moment disagree with the motion of Mr Madhu Dandavate about the urgent need for electoral reforms? But it was infra dig, for the Government to accept it, with the Law Minister, Mr Shiv Shankar, quibbling over the interpretation of "urgent" in an amazing display of casuistry. Anyhow, Mr Shankar did volunteer the exciting information that certain reforms were under consideration of the Government. Unless the powers that be actually move in the matter people have ceased to be impressed by such ritualistic utterances. Secondly, the Government has hardly strengthened its credentials by arming itself with more powers through the passage of the Essential Commodities (Special Provisions) Bill and the Prevention of Blackmarketing and Maintenance of Supplies of Essential Commodities (Amendment) Bill. If the Government has not had the political will to preventively detain blackmarketeers and hoarders, would it have the political will to bring them to speedy trial? Legislative over-activity cannot serve as a fig-leaf for politically motivated inaction. Moreover, the amendment that henceforth not judges but persons qualified to be judges can sit on the review boards raises doubts about whether the Government would resist the temptation to misuse the preventive detention measure. Mr Birendra Singh's performance in the Lok Sabha was symptomatic of the cynicism with which politicians try to extract political mileage even from the people's economic distress. Sugar, he said, would henceforth be available for Rs 6.50 a kg. But to dramatise his accomplishment he mentioned Rs 12 as the price ruling in various markets. The truth is that the price of sugar has seldom exceeded Rs 9, at least in north India.

Hamletian

The strategy to boost production, pompously called supply management, has remained almost a non-starter because what is needed is not piecemeal tinkering but a thorough revamping of the existing system of controls and taxation. Mr Venkataraman, therefore, nowadays talks of demand management and, like a latter-day Hamlet, is unable to decide whether to impound or not impound the dearness allowance of government employees. Impounding would serve little purpose. Any contractionary effect on aggregate demand would be neutralised by the Government's own growing non-development expenditure. And then the money will have to be repaid. A strong opinion in the national capital is that the first step on the demand management side should be economies in the Government's own unproductive expenditure. For instance, instead of impounding the dearness allowance of its employees the Government should prevent their number from rising. The army of government employees has increased from 10.3 million in 1972 to 15.3 million in 1980. The Central and state governments should freeze recruitment, fill new posts through transfers and allow the numbers employed to dwindle through superannuation.

Over-secretive

The degree of official secrecy has a vital and yet insufficiently realised bearing on the quality of democracy. The Indian Law Institute has done a commendable study on the subject. Where the two conflicting rights, of secrecy and openness are concerned, it is always a question of finding the right balance. The value of the Indian Law Institute study lies in the fact that while it recognises the need for a balance between secrecy and openness, it points out the imperativeness of tilting the balance in favour of openness rather than secrecy, as is the case now. The vague rubric "public interest" cannot be a ground for secrecy. Definite guidelines must be drawn. Under Article 77 of the Constitution the President makes rules for the transaction of business by the Government of India, and for allocation of work among Ministers. The allocation rules, although made public till 1973, are now treated as confidential without any constitutional sanction. The Government's intention has been to cover up its own irregularities and defects rather than protect any public interest. Unlike the UK or the USA, in this country rules are framed in the secret chambers of the bureaucracy. Further, as is common knowledge, uncomfortable reports of various inquiry committees are never disclosed. In 1976 the Government directed its departments not to submit confidential files dealing with questions of policy to the Comptroller and Auditor-General. Ironically, even the recommendations of a study group on the Official Secrets Act are a secret. Section 5 of the Official Secrets Act, covering both espionage and the disclosure of official secrets, confers absolute power to prosecute those who impart information and those who receive it. Any information comes within the ambit of the Act so long it is a "secret", but the word "secret" has not been defined. To judge the impact of the Act from the number of reported cases of prosecution would be misleading. These cannot possibly reveal the frequency of the threats really used to prevent publication of unsavoury information or give an idea of the pervading fear among journalists of the Official Secrets Act.

DATELINE NEW DELHI

People's right to know has two aspects. First, the Government must not deter free flow of information. Secondly, it must make available to the people information not in the prohibited category. The ILI study has made sensible recommendations and recognised that the question of dissemination of information is a complex one. Defence, for example, has to figure in the list of secrecy, but certain aspects of it, such as defence factories and foreign purchases, when they involve mismanagement or corruption, cannot be treated as secret. After surveying the laws and practices in other parts of the world, the ILI has suggested that, broadly speaking, the following subjects be categorised as secret : defence or security of the nation, foreign relations, Cabinet proceedings and documents for they involve collective responsibility, information which is likely to be helpful to the commission of offences or impede detection of crime, private information supplied to the Government and information whose premature disclosure may enable the unscrupulous to make unfair financial gains. It is, however, recognised that even in these areas information may have to be disclosed in the public interest. Publication in the public interest should be statutorily recognised as permissible.

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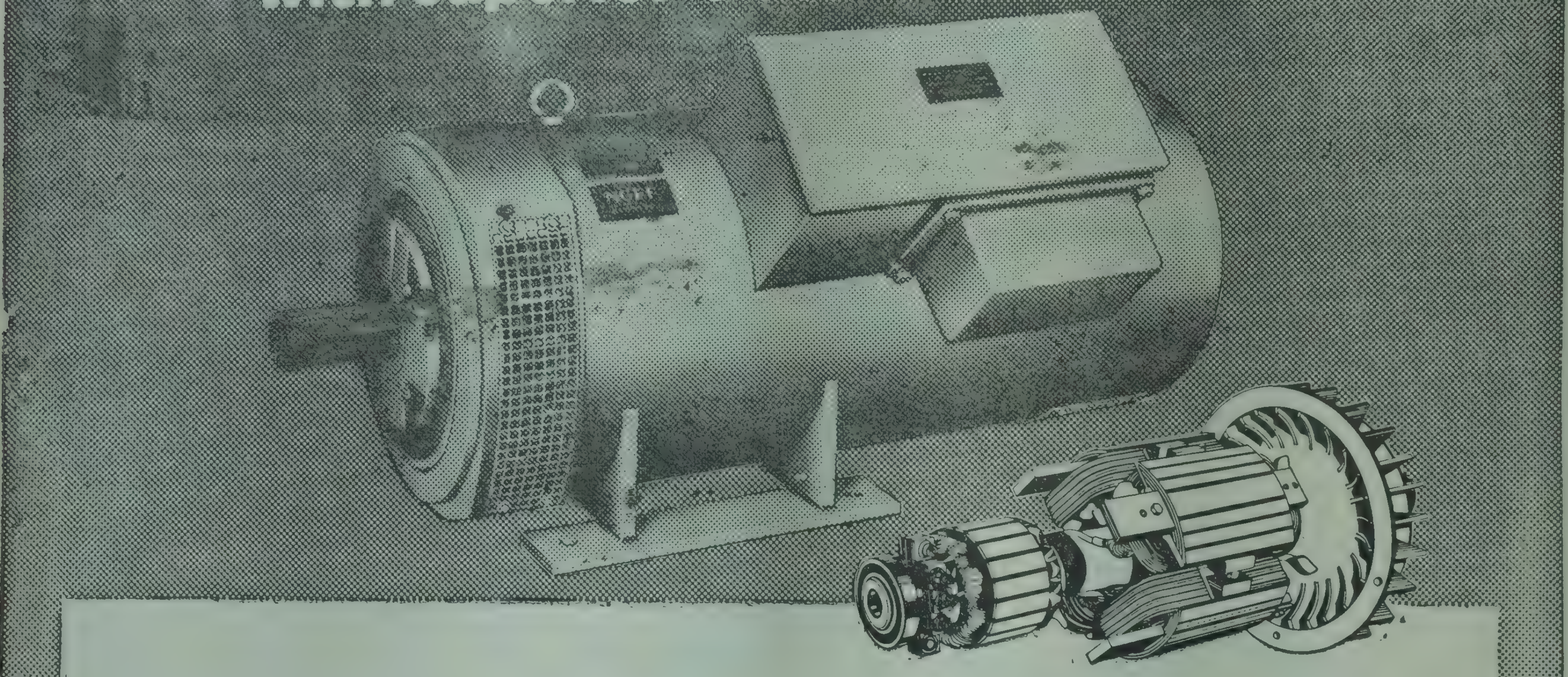

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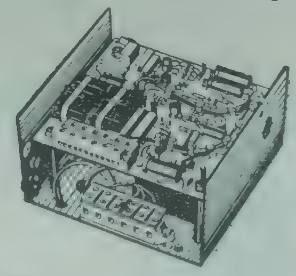

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EASTERN INDIA TODAY

Ailing jute industry

By P. C. MAHANTI

THAT all is not well with the jute industry has been known for some time. But it appears to have escaped general notice that the current crisis phase has been of longer duration than any in recent past. It is not certain how and when the recovery will come. The industry employs a workforce of 2,500,000 men and affords indirect employment to millions of families through raw jute cultivation in eastern India, and livelihood of all these people dependent on jute will be jeopardised if the industry as a whole becomes sick.

If the attributes of sickness should be a whopping loss of Rs 10 crores a month as the Indian Jute Mills Association chairman has been saying for six months now, then the industry is sick already — or at least a kind of creeping sickness is enveloping it gradually. The workers of course are not convinced that the financial condition of the industry is as bad as the millowners have been saying it is. A spokesman of the Indian Jute Mills Association has just said that because of continuing losses of as serious an order as Rs 10 crores a month, the industry practically has eaten up its share capital, reserves and bank overdraft limit—in other words, it is now in a state of total bankruptcy.

The question is how long can an industry—an industry as large as jute—go on like this? At some point, there will be a breakdown and mill after mill will have to close. New Delhi is certainly aware of the crisis situation in the industry, but has chosen to remain silent on any move to restore the old subsidies on jute goods exports. The recession hit West, especially the United States of America, is unable to lift its normal requirement of jute goods and for some curious reason, the Soviet Union is not entering the market for hessian of which it is a large customer in a big way. At least Russian purchases could restore some confidence to the sagging gunny market. In the domestic market too, the Directorate General of Supplies and Disposals has not been buying in significant quantities and the cement industry, a large user of sacking bags, is recycling a lot of used or old bags into use.

While the industry is still struggling in a depressed market, the workers have begun taking to militant ways. On August 10 they went on a one day token strike. That was advance warning of regular industrial action later if, in the meantime, the industry did not concede their demand on revised grades and scales of pay or wages that a West Bengal Government Committee has recommended and subsequently accepted by the Labour Minister, Mr K. P. Ghosh. The strike threat is backed by all the 13 trade unions in the jute industry.

Meanwhile, the industry has sought the permission of the West Bengal Government not to be forced to pay the minimum bonus of 8-1/3 per cent on the ground of its serious financial condition. The exemption is unlikely to be granted, but the no bonus payment move is not likely to mollify the bitter feelings of the jute workers. But then if the industry is totally out of funds, as is says it is, how can it pay the statutory bonus unless the Government or the commercial banks come to its rescue?

Judging by the current level of market prices for jute goods and the increases in the support prices for raw jute, no mill can be earning a profit. It is quite credible that the industry is losing, on an average, Rs 1,200 on a tonne of jute goods produced. The cost of raw jute alone has gone considerably while the wages of the worker have been raised up by Rs 32 per month, not taking into account the substantial rise in the cost of petroleum products like batching oil, diesel oil and other inputs.

Individually, the loss on carpetbacking is placed at Rs 2.000 per tonne, on hessian at about Rs 1,300 per tonne and on sacking about Rs 800 a tonne. An average mill producing 2,000 tonnes per month is now said to be losing Rs 21 lakhs a month.

Here one comes back to the old question. How long can the industry carry on like this or what can be done to save it from disaster? As in every such case, two types of measures are needed — short term and long term. The short term steps obviously are to provide a measure of subsidy to exports to make it possible for the industry to offer its products at competitive prices. At the same time, the DGSD should place an immediate order for 100,000 tonnes of B-twills or sacking, linked to definite raw jute purchases against the order. Major consumers like the cement industry may be asked to use new bags only; and include jute goods in all immediate bilateral deals. This is what the industry has been asking for but New Delhi has been maintaining a studied silence. Dilydallying with a pressing matter like this is fraught with serious consequences. New Delhi should be aware of that.

The long-term ones lie in the direction of a total restructuring of the industry with appropriate measure of modernisation, diversification and, of course, rationalisation of the labour force. There have been plenty of recommendations on what long-term measures are needed, but a fresh study can still be ordered since the rapidly expanding domestic market shows that the jute industry in this country has a future.

Food production

Bihar, primarily an agricultural state in the country, is taking energetic measures to step up food production. The per capita availability of land in the State comes to 0.12 hectares only with the present population of 69.8 million, of whom 75 per cent live on land. Since the population is going on increasing while there is no scope to add to its present cultivated land area of 8.5 million hectares, intensive cultivation is most important. Equally important is the supply of inputs and use of the irrigation facilities created. The State produced 10.64 million tonnes of foodgrains last year and the current year's target is 11.6 million tonnes.

An expert has calculated Bihar's irrigation potential at 4.882 million hectares—2.452 million heactares from major and medium irrigation projects and 2.430 million hectares from minor irrigation schemes. But the current level of utilisation is only 3.52 million hectares, which leaves a gap of 1.362 million hectares between the potential and its use. Clearly, there is a lot to be done in the fields of land development and water management in the State. Incidentally, an official committee's finding that agricultural productivity in irrigated areas is not up to expectations is disturbing, and needs probing.

ONGC's plans

It is interesting to learn that the Oil and Natural Gas Commission entertains high hopes about the oil discovery prospects in eastern India. Mr P. T. Venugopal, the chairman, thinks the potential for oil discovery in the region, is quite large. He wants his organisation to do a lot of work in Nagaland particularly, and a large number of rigs have already been ordered for use is this State and other areas in the eastern region where the Commission is doing exploration work. In Assam itself, the ONGC hopes to raise output from three to four million tonnes annually.

BOOKS & IDEAS

Alarming growth in absenteeism

Management of Absenteeism

By S. K. BHATIA

Asian Publication Services, 243, *Defence Flyover Market, New Delhi* 110 024, *New Delhi* 1981 *Pages* : 1-237. *Price Rs* 60 *US $* 12.00.

Mr Bhatia is Personnel Manager of Bharat Heavy Electricals Limited, Bhopal, which has a large workforce. The present study is the result of the author's efforts in identifying and controlling the problems of absenteeism in a large industrial undertaking employing more than 10,000 employees and series of articles on the subject contributed by him in the management journals.

The subject matter of the book is, no doubt, a field, which has not been subjected to much analysis and is in fact a subject of interest to personnel managers who are interested in tackling the problems of absenteeism both in the legal and moral means.

The author has arranged the subject matter of this book in five sections, the first section introducing the subject of absenteeism and examining the causative factors, the second and third sections devoted to the case studies on the subject; section four offering solutions to the problem and the last section dealing with the role of various agencies in tackling absenteeism. There is an additional section of about 50 pages with appendices and bibliography.

Twentytwo million employees were working in the organised sector in India towards the end of 1978. On an average we are losing 20 million man days every year on account of strikes and lockouts alone. Apart from this, the author's analysis based on the data published by the Labour Bureau, Simla, and the Annual Survey of Industries (ASI), shows that the yearly rate of absenteeism has gone up from 7 per cent in 1957-58 to around 20 per cent in the recent years and the author finds the situation quite alarming. The rate of absenteeism is the highest in April, May and June — the obvious causes being "pull of the land", closure of educational institutions, marriages, harvest season etc.

The absenteeism is notably high in certain industries like plantations, in mica mines etc. Compared to Western Europe, our absenteeism in general is very high. We have yet to establish industrial consciousness among workers. In analysing the causes contributing to absenteeism, the author is of the view, that the study of the organisational factors at plant level can be more fruitful in taking remedial steps by the management and the external factors (socio-cultural) are generally outside the control wholly or largely of the individual industrial organisation. Nevertheless these external factors like inadequate housing facilities, insufficient transportation facilities, lack of recreational facilities, conditions in the labour market which lead to 'job-shopping', and holidays pattern *etc* contribute to absenteeism which should be a matter of concern to anyone who is interested in 'cost reduction' on account of absenteeism.

The second section of the book is useful to the plant level managers in helping them to analyse the causative factors of absenteeism. The findings of the author are worth reproducing here:—

"(a) *Rules & Procedure* :

There is a healthy down-ward trend in absence rate in the plant but the pattern is unplanned, unauthorised and of short duration leave due to misuse of privilege extended by the management regarding non-production of medical certificate for less than two days sick leave. This causes large number of spells of 1 or 2 days duration.

- Absenteeism is more after pay days and weekly off days.
- Advance crediting of leave during peak production period of 25th December year affects absenteeism.
- Accumulation limit of sick leave is less and encourages employees to avail.
- Few private medical practitioners are contributing to absenteeism.
- Inadequate check in sanctioning of leave.

(b) *Core group of habitual absentees* :

- Existence of a core group of habitual absentees.
- Beside this, a large number of employees are exceeding the eligibility limit of leave.

(c) *Factors/causes identified in survey analysis :*

- Indebtedness.
- Ill-health.
- Lack of awareness among habitual absentees of having taken more leave.
- Frequent visits to home town.
- Personal factors (in contrast to organisational factors) have more significant relationship with absenteeism.
- Survey analysis clears some common myths and beliefs existing in the plant that absenteeism is due to —
  (a) Non-provision of quarters by the company.
  (b) Non-provision of bus facilities by the company.
  (c) Company have large number of dependents to support.
  (d) Welders are "more habitual absentees,"

Remedial measures, are easy when an analysis is made on scientific lines.

Personal factors — individual *per se* — play a major role in absenteeism. Some of the findings of the author under personal factors are quite revealing :— 1. The chronics (habitual absentees) are more in the higher age bracket and higher experience group who find a justification in seeking relaxation for having done so much for the organisation and also a sense of oversecurity developed over year. 2. The chronics are miners in the higher grades and service in the grade. 3. Chronic absentees have taken large amount of loans ranging from Rs 5,000 and above and average groups below this amount. 4. Chronic absentees are more on the literate group. 5. They are more in the married class. 6. The chronics live far away from the factory. 7 Frequency of visits to home town. 8. Chronics are in those groups of people who borrow money for the day to day expenses. 9. Those sending money home are not chronics—they are more responsible.

The author's findings as regards policies relating welfare measures and absenteeism that it may be more meaningful to help employees secure their own mode of transport by extending loans than to expand the fleet of company transport and it will be more prudent to help employees build their own houses by providing loans than constructing additional houses which goes to lock up capital and add up to other associated problems should provoke the managements to take such policy decisions.

The contribution made by the organisation in improving the lot will bring better results when individuals also play their role. It is the integration of the contribution of both the individuals and organisation, which help in tackling the problem of absenteeism both at micro and macro levels. The habitual absentees are to be dealt with when once they are identified in an imaginative way. While managers often grumble about their absenteeism problem, they do not necessarily do anything about it.

The section on cures for absenteeism lays emphasis on (1) the supervisor who has to "humanise" the job and create interest and co-operation in the organisation. 2. Care in selection and placement. 3. Preventive health programme. 4. Reduction in working week and flexi-time. 5. Attendance bonus schemes. 6. To recognise the fact that leave is important for health. 7. To see that the cure of absenteeism does not create in its wake more labour turnover *etc* which again is a costly factor. 8. Habitual absence should be tackled as a case of indiscipline.

In the fifth section, the author identifies the following agencies to be involved in tackling absenteeism :

1. Supervisor, 2. Individual, 3. Union, 4. Shop Council, 5. Training Department, 6. Technology and Industrial Engineering, 7. Top Management, 8. Departmental Head, 9. Medical Department, 10. Accounts Department and 11. Personnel Department.

The role of counselling in controlling chronic absenteeism has according to the author, improved 75 per cent of the absenteeism. Counselling should be preceded by understanding the person concerned. The counseller has to listen to the problems and he should not give his evaluative judgement at once which can be a barrier in meaningful communication.

The author has highlighted the role of counselling in reducing absenteeism in a significant manner. On the whole, Mr Bhatia, has made a sincere attempt in analysing the problems of absenteeism and methodologies to be adopted in identifying the problems and the possible preventive measures, and covers a hitherto comparatively unexplored area.

This book would be particularly useful to all those who are concerned with 'personnel management' in units big or small. The author's research study based on one of the large public sector units in India, should be a guide to other public sector units in evaluating their own experiences and to find ways and means in effecting economies in cost — an element which is very important in determining the profitability of public sector enterprises in India.

N. Hariharan

Substitute for paraffin

AN article in *Ceres*, published by the Food and Agricultural Organisation, suggests that sugarcane offers renewable source for producting industrial wax.

The article says: "With the gradual depletion of the world's fossil fuel reserves, many often overlooked by-products of the petroleum industry are likely to be threatened as much as motor fuels. Among these are paraffin wax and micro-crystalline wax, both widely used for various industrial purposes.

"In the search for a suitable substitute available from renewable resources, scientists are turning their attention to sugarcane wax as a substance showing considerable promise. Sugarcane is grown abundantly in most tropical countries. Thin layers of wax are present on the rind, particularly at the internodes. The amount of wax available on any plant depends on a number of factors, such as the variety being grown and agro-climatic conditions, but it it estimated that on average it forms about 0.12 per cent of the weight of the cane.

"However, when sugarcane is crushed in conventional sugar milling plants, more than 50 per cent of the wax contained on the rind finds its way into bagasse which is subsequently burned in the boilers as fuel. The remaining portion of the wax finds its way into the sugarcane juice. Since the wax is insoluble, it precipitates, accumulating in the filter cake where it may comprise from four up to 20 per cent of the total weight of the cake.

"In India, one sugar milling plant is now producing about 150 kg of crude wax per day, which is being used, in some cases after refining, in the manufacture of carbon and stencil papers and in various types of polishes. The working of the plant was described recently before the International Society of Sugarcane Technologists by P. J. Manohar Rao, Additional Chief Director in India's Ministry of Agriculture and Irrigation. Cane wax is extracted by following a solvent extraction process using mineral turpentine as the solvent for extracting crude wax and isopropyl alcohol as the solvent for refining crude wax. However, declares Rao, further research and development are necessary to improve the quality of the cane wax."

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Report of the Study Team on Agricultural Credit Institutions in Jammu & Kashmir, published by Mr V. P. Malhotra for the Reserve Bank of India, Agricultural Credit Department, Worli, Bombay 400 018, pages 451, price not mentioned.

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Gold and silver price maze

Concluded from page 419

this time the Bombay price surging ahead of the London price. This position has continued till July 1981.

Besides, the relative price difference in case of gold between the two markets has also gone up of late. During 1980, the London price had been higher on an average by 7.4 per cent. But in the first seven months of 1981, the Bombay price has become higher by an average of 21.8 per cent. In fact, in 1981, the relative difference has increased fairly steadily and was nearly 30 per cent in July 1981, and was the highest in the last 19 months beginning with January 1980.

In view of the higher prices of gold in the Bombay market than in the markets abroad, a good amount of gold is reportedly being smuggled into India. According to some reports, more than 5,000 tolas of gold is being smuggled into India every day from Dubai. According to these reports, gold is being bought in London and Zurich and then smuggled into India *via* Pakistan.

One can of course wonder whether the smuggling of gold and silver remains profitable in the changed situation of their relative prices. By and large gold is smuggled into India and, in return, silver is smuggled out. With the price difference of silver coming down heavily, one would have imagined margins in the smuggling of gold and silver might not be worth the risk involved in such activities. But the calculation of those engaged in this illicit inflow and outflow are somewhat different.

Emergence of financial managers

Concluded from page 424

ing, so that this business is developed on healthy lines, contributing to the ultimate good of the nation.

The idea of forming a Merchant Bankers' Association on the lines of Indian Banks Association may be worth pursuing to provide a forum for fruitful discussions. Better attention to the training programme to meet the personnel requirements of the MB divisions of the banks and FC companies will also go a long way to develop merchant banking on sound lines. The State Bank of India, being the premier commercial bank of the country, could play a key role in organising a well-planned training programme in merchant banking on scientific lines.

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5. The purchase of above coins/sets will not bestow permission for export thereof, which is regulated by special orders issued from time to time.

INDIA GOVERNMENT MINT, BOMBAY

Household savings

Sir,—Dr Vasudevan's article on Estimating the Household Sector Savings in Currency and Deposits (*Commerce*, August 1, 1981) is quite interesting and topical. It raises certain methodological issues in the estimation of savings in the form of currency and deposits. His apprehension that the data on currency and deposits savings are essentially statistical derivations and the behavioural elements in the propensities to save in currency and deposits are not present, is quite debatable. It is empirically well demonstrated in many studies (notably Dr Mujumdar, Venkatachalam and Raghavachari's study in RBI occasional papers, June 1980) that the national income is one of the most significant factors influencing the currency with the public, demand deposits and time deposits, of commercial banks. It is too simplistic to say, that there is high correlation between household savings in currency and deposits with incremental currency with the public and deposits. The study cited above found that income elasticity of currency to be 0.82, demand deposits 1.32 and time deposits 1.45. So our opinion is that the present estimation of the household savings in currency and deposits is not void of behavioural elements.

Regarding the test of hypothesis *i.e.* the demand for transaction balances is positively correlated with the nominal income or output and prices, it may be pointed out that some estimates between variables that is outstanding currency and deposits of the household sector of *t*-1 period and the nominal income at *t* period, should be attempted.

It may be further added that Dr Vasudevan's suggested estimation of the household sector savings in currency and deposits, in order to derive speculative demand for cash balances should attempt to relate the income velocity of currency of the households with an average price of some sensitive commodities including gold, silver and industrial securities, instead of with short-term rate of interest for more meaningful results.

Dr Vasudevan has pointed out that in respect of currency and deposits, increases between March 31 of a year and March 31 of the subsequent year, will contain 'shock effects'. He has suggested that averages of outstandings of currency and deposits at the end of each month for the years concerned should be worked out to know the 'flow' of these variables. The utility of Dr Vasudevan's article would have been enhanced had he worked such averages for a few years and compared with the outstandings between preceding March 31 and succeeding March 31 of those years. This would have given some idea to of the extent of divergence.

Dr Tapose Coomer
Bombay

Industrial sickness

Sir—The report by the Reserve Bank on *Currency and Finance* 1980, reveals that well over 50 per cent (out of 21,000) sick units are in the most advanced industrial states of West Bengal and Maharashtra, the major reason being labour millitancy and unions' destructive attitude. Further, the number of legislations enacted by these labour welfare states, such as Minimum Wages Act and other benefits are such as to practically kill the goose that lays golden eggs. Further the Government "the champion of SSI units" demands in advance, even when sales are made on credit, payment of excise, sales tax, ESI, PF and other dues including raw material and fuel costs, while there is no remedy to recover their blocked funds in various outstandings with government and private sectors.

Tatya Tendulkar
Kolhapur

Environmental pollution

Sir,—The haphazard growth of industrialisation particularly in the metropolitan and large cities like Ahmedabad, Bombay, Calcutta, Kanpur etc, has witnessed the spread of lung cancer, tuberculosis, bronchitis, blindness, asthma etc. Such a health hazard is a serious threat due to the alarming rise of environmental pollution. The alarming magnitude of environmental pollution has greatly been responsible for the deteriorating quality of life in metropolitan cities. The air pollutants are carbon dioxide, carbon monoxide, sulphur dioxide, nitrogen oxide, hydrochloric acid, etc, which are a health hazards.

There is an imperative need for checking the alarming magnitude of industrial smoke in metropolitan and large cities. It should be pointed out emphatically that the industrial growth in cities has to be restricted and the industrial licensing policy should emphasise decentralisation of industries. The low chimneys of power stations and industrial units be raised so that the smoke does not spread in the residential neighbourhood complex.

The garbage problem particularly in Ahmedabad, Bombay, Calcutta, Delhi and Kanpur is assuming alarming proportions of collection and disposal. There is scope for research and development in recycling waste.

To a large extent industrial waste results in polluted rivers and seas. Water pollution is a serious menace to marine life and human population. Surprisingly, the penalty now imposed by municipal corporations for dumping untreated industrial waste is negligible. There is need to impose a heavy penalty and even life imprisonment for such offence as it also results in spreading of waterborne diseases particularly in metropolitan and large cities.

Surprisingly, forests have been ruthlessly destroyed giving rise to frequent occurrence of floods. In the name of urban development even rural areas are being steadily encroached upon, the consequences of which would be serious ecological imbalance, further marring human existence.

Gopal Bhargava
New Delhi

Photopolymer system

Sir—We refer to Table 2 in the article "Liquid photopolymer system" (*Commerce*, March 12, 1981) and wish to point out that besides the solid photopolymer plates, BASF also have nyloprint liquid systems for newspaper printing. Matter of fact, BASF offers the largest choice of photopolymer plates for newspaper printing, consisting of: (1) Nyloprint WD plates: water washable solid relief plates; (2) nyloprint WM plates: water washable pattern plates; (3) nyloprint LD plates: water washable liquid relief plates; (4) nyloprint LM plates: water washable liquid pattern plates; (5) nyloprint RD plates: alcohol washable sold relief plates; and (6) nyloprint RM plates: alcohol washable solid pattern plates.

The range of photopolymer plates extends further to conventional nyloprint plates meant for commercial printing, nyloflex meant for flexo printing and nylotron LN photoresist films for printed circuits (PTH).

H. E. Kizilbash
Bombay

To The Editor

LETTERS

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Special Reports

Relief for tea industry?

From P. C. MAHANTI

CALCUTTA

IN the first week of August, there was a "national tea meet" in which the tea industry, the Commerce Ministry of the Government of India and state governments concerned took part. The meeting was called at the instance of the Commerce Ministry to consider the developing crisis in the tea industry and what reliefs are called for to mitigate the hardship that the gardens both in the north and south are going through. The meeting lasted two days and at the end of it, there was a general consensus on the following points :

(1) Excise duty on tea should be substantially reduced; indirect taxes paid on exports should be refunded through a simple drawback procedure; excise duty on packet tea should be substantially reduced or totally removed; sales tax on auctioned tea should be substantially cut.

(2) Agricultural income tax and other local government taxes should be adequately cut, if not suspended altogether. Since tea is being taxed as an agricultural operation by the State Governments concerned, the industry should also be treated like agriculture for bank credit purposes; in other words, the tea industry should be granted credit at concessional rates of interest.

(3) Considering the financial plight of the industry, the existing procedure in regard to the advance payment of income tax should be suitably amended to provide reasonable relief.

(4) The West Bengal rural employment cess should be waived on all export sales of tea; producers using their tea for packeting purposes should also be exempted and tea being used for production in value-added form should not be compulsorily required to go through auctions. The West Bengal Government should decide early on a representation of the industry that it must be given freedom to choose its own channel of marketing and total exemption from the cess. These reliefs have been recommended for a period of three years.

The deliberations at the meeting were preceded by a very forthright speech by Mr P. K. Kaul, the then secretary to Commerce Ministry, who expressed full sympathy with the tea producers and at the same time gave a graphic picture of how costs have been overrunning prices. The Commerce Minister also agreed with his secretary and then cheered up the industry, and encouraged the belief that government action on the agreed recommendations will soon follow. Auctioneers in London also were led to believe that some fiscal relief would be forthcoming in the near future and they instructed their agents in Calcutta not to ship tea until the relevant official decision was known. This has necessarily led to a sharp decline in tea shipments from Calcutta port as well as from the country as a whole. The Tea Board, it is understood, has not received a single application for tea export licence during the past two weeks.

Messrs V. P. Maithel and S. K. Mehera, chairman and vice-chairman, respectively, of the Indian Tea Association who briefed the press on the crisis situation in the tea industry leading to the stalling of exports, stressed the point that this development was not conducive to the fulfilment of the export target in 1981-82 which has been fixed at 230 million kilograms. As it is, there is an oversupply of tea in world market, and the various imposts coupled with the inexorable cost pressures are making the Indian tea more and more uncompetitive.

The chances of international agreement among the various tea producing nations on fixing a global quota for tea export are no brighter than it ever was. The opposition of new African producers, especially Kenya, to the prescribed quota system has been frustrating negotiations at various levels organised by UNCTAD and GATT.

While the outlook for exports thus remains uncertain, the domestic market has been developing an unexpected turn. The growth rate in the consumption rate has not only slowed down, but was actually negative during the past year. The high price of sugar and its relative scarcity were largely responsible for the decline in home consumption of tea. There was yet another factor which was sociological — the younger generation seems to prefer cold or soft drink to a hot beverage like coffee or tea. The tea producers are naturally worried about the trend, and propose to hold an internal market survey to find out what can be done to revive the tea drinking habit among the younger people in the country.

The greater worry is the falling trend in tea auction prices. Between January-June last year and the same months in 1981 there was a sharp fall. Between 1976 and today there is of course some increase in price, but if one takes into account the very high rate of inflation in the Indian economy, the tea auction price today is significantly lower in real terms.

Average prices realised (inclusive of excise duty) at different auction centres

(Combined Dust and Leaf)

Year	Rupees per kg			Pence per kg
	CALCUTTA	COCHIN	GAUHATI	LONDON
1976	12.08	11.17	10.83	84.8
1977	16.77	16.30	13.30	162.0
1978	14.02	12.32	12.40	123.9
1979	14.69	12.05	12.36	107.1
1980	15.08	13.14	12.69	104.1
January-June				
1980	14.86	14.27	13.20	107.9
1981	14.34	13.18	11.93*	100.9

31st July 1981
SG : HF

* upto May, 1981.

CORPORATE SECTOR

A marked improvement in financial performance

BOMBAY

THE latest study on the financial performance of the portfolio of public limited companies assisted by the Industrial Credit and Investment Corporation of India Ltd (ICICI) indicates an all-round improvement in the performance of the corporate sector as a whole during 1979-80. Sales during the year under review increased by 15.4 per cent, the respective increases in gross profits (profits before interest and depreciation provision and taxation) and operating profits or profits before tax (gross profits minus interest and depreciation) being 17.4 per cent and 19.4 per cent. As a sequel to improved sales, profits after tax increased considerably enabling the private corporate sector to augment its ploughed back profits, reflected in a 35.5 per cent rise in retained profits, besides enabling a number of companies to pay higher dividends. The industry groups mainly responsible for this improved overall performance were electrical equipment, tyres and tubes, paper and paper products and textiles. There was a mild turnaround in the profitability of shipping. On the other hand, an important industry whose performance deteriorated during the year was cement. The study also revealed that there was a decline in capacity utilisation in the case of many industries.

On the basis of corporate results available at the time of the preparation of the study, the ICICI has predicted that the corporate sector's operations would continue to be generally satisfactory during 1980-81.

The ICICI study covered 417 companies for the five-year period 1975-76 to 1979-80. The companies in the sample with a total paid-up capital of Rs 1,483 crores in 1979-80 accounted for 53.9 per cent of the paid-up capital of non-government public limited companies at work as at the end of March 1980.

The net sales of the 417 companies registered an increase of 15.4 per cent from Rs 10,137.3 crores in 1978-79 to Rs 11,695.9 crores in 1979-80, as against the annual growth rates of 11.5 per cent in 1978-79, 8.6 per cent in 1977-78 and 12 per cent 1976-77. Most of the industry groups (except textile machinery, cigarettes and woollen textiles wherein the net sales declined) showed increases in sales during 1979-80 over those in 1978-79. Some of the largest rises were recorded by sugar (29 per cent), followed by ferrous metal products (26.5 per cent) and electrical equipment (18.7 per cent). However, cement (1.5 per cent) and shipping (1.1 per cent) registered only a marginal increase in sales.

The total income of the sample companies increased by 15.3 per cent in 1979-80 as against 12.4 per cent in the previous year. The total expenses recorded an increase of 15 per cent to Rs 10,577.4 crores in 1979-80 from Rs 9,199.1 crores in 1978-79 against the increases of 12.1 per cent, 9.1 per cent and 10.6 per cent respectively in the three preceding years. More than half (55.8 per cent) of the rise in total costs in 1979-80 was accounted for by the expenditure on raw materials consumed which increased by 14.2 per cent (10.9 per cent) over their previous years' level, while salaries and wages increased by 12.6 per cent (12.2 per cent). It is interesting to note that expenditure on power and fuel by the sample companies rose by 14.9 per cent in 1979-80 (over that in 1978-79) over and above the rise of 18.2 per cent in 1978-79 (over that in 1977-78).

Profitability and profit allocations

Gross profits, profits after tax and retained profits recorded significant rises during 1979-80 over the previous year's levels. Gross profits of the 417 sample companies increased by Rs 238 crores or 17.4 per cent to Rs 1,609.3 crores in 1979-80 as compared to the increases of 14.4 per cent, 6.7 per cent and 5.4 per cent respectively in the three preceding years. There was a rise of 19.4 per cent (23.3 per cent) in profits before tax or operating profits in 1979-80. Profits after tax or disposable profits increased considerably by Rs 90 crores (23.8 per cent) from Rs 378 crores in 1978-79 to Rs 468 crores in 1979-80. Consequently, the rate of growth in profits after tax as per cent of net worth was higher at 14.1 per cent in 1979-80 as against 12.6 per cent in the previous year.

The appreciable rise in disposable profits enhanced the dividend paying capacity of the corporate sector. Dividends paid increased steadily from Rs 123.5 crores in 1975-76 to Rs 189.4 crores in 1979-80. The payout ratio as

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Aug. 28, 1981 over		
		Aug. 28, 1981	A week ago	A month ago	A year ago	A week ago	A month ago	A year ago
Rice	Average	3.60	3.60	3.50	2.80	—	2.9	28.6
Wheat	Average	3.50	3.50	3.50	2.50	—	—	40.0
Jowar	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Bajra	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Gram dal	Average	6.50	6.50	6.30	6.00	—	3.2	8.3
Tur dal	Average	6.80	6.80	6.60	5.60	—	3.0	21.4
Potatoes	Average	2.25	2.40	2.40	2.50	—6.3	—6.3	—10 0
Onions	Average	1.60	1.80	1.60	1.00	—11.1	—	60.0
Milk per litre	Buffalo	6.00	6.00	6.00	4.30	—	—	39.5
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	5.80	6.40	6.80	8.80	—9.4	—14.7	—34.1
Gur	Average	6.50	6.60	6.50	6.00	—1.5	—	8.3
Groundnut oil	Average	16.00	17.50	15.50	11.00	—8.6	3.2	45.5
Vanaspati	Average	15.00	16.50	16.00	—	—9.1	—6.3	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

total profits after tax was 40.5 per cent in 1979-80 against 50 per cent during 1975-76 to 1977-78 and 45.7 per cent in 1978-79. Retained profits or profits ploughed back in the companies rose significantly by Rs 73 crores from Rs 205 crores in 1978-79 to Rs 278 crores in 1979-80.

Profit margins

Profit margins represented by gross profits as percentage of sales which had declined from 14.4 per cent in 1974-75 to 13.1 per cent in 1977-78 rose to 13.5 per cent in 1978-79 and again to 13.7 per cent in 1979-80. Although the falling trend in the return on capital employed and operating profit ratios noticed during 1974-75 to 1976-77 showed an upward movement in 1977-78 and also in 1978-79, these ratios during 1979-80 were well below their levels in 1974-75. Operating profits as percentage of sales in 1979-80 marginally increased to 7.2 per cent from 6.9 per cent in the previous year. Although the operating profit to sales ratio went up in 1979-80, the increase in profitability was insufficient to cover the increase in financial requirements of capital formation. During 1979-80, industry groups such as pulp, paper and paper products, automobiles and cycles, and glass and pottery exhibited gross profits to sales ratios which were higher than that for the total sample.

Return on capital employed represented by profit before tax plus interest as per cent of capital employed (*i.e.* net worth and all borrowings) was a little higher at 19.7 per cent in 1979-80 as against 18.9 per cent and 17.9 per cent respectively in the preceding two years. The companies with return on capital employed of 20 per cent or more increased from 179 in 1978-79 to 206 in 1979-80. On the other hand, the number of companies with negative rates of return on capital employed, which had increased from 39 in 1975-76 to 46 in 1977-78 declined to 31 in 1979-80. During 1979-80, industry groups such as electrical equipment and glass and pottery showed substantially higher than the average return on capital employed for the sample as a whole (19.7 per cent).

Gross capital formation and financing

Total assets (gross fixed assets, inventories and other current assets) of the sample companies increased by Rs 1,759 crores (Rs 1,135 crores) in 1979-80. The rate of increase in gross capital formation accelerated continuously from 6.2 per cent in 1976-77 to 11.9 per cent in 1978-79 and further to 15.3 per cent in 1979-80. The rate of growth in gross fixed assets also registered a substantial rise at 11.4 per cent in 1979-80 against 10.8 per cent in 1978-79. In absolute terms, the increase in gross fixed assets

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As I see it

Dandakaranya Development Project

A report from Bhubaneshwar published by the *Business Standard* of Calcutta on August 6 states that the Union Government has finally decided to implement its decision to wind up the Dandakaranya Development Authority (DDA), which had been set up in 1958 to rehabilitate the refugees coming from the then East Pakistan (now Bangladesh) in the wake of the partition of India. Apparently the Government is of the view that the objectives for which the DDA had been set up have been duly implemented. That was the gist of a statement made by the Minister of State for Supply and Rehabilitation in the Lok Sabha on May 5, 1981.

Against the Minister's assertion about the completion of the project, one has to consider the fact that barely six months earlier, in December 1980, the Estimates Committee (1980-81) of the Seventh Lok Sabha, in its second report, did not see the possibility of an early completion of the project. It emphatically stated, "The Committee do not agree with the view of the Government that at this stage a further review of the DDA is not necessary. As already pointed, there has been failure on the part of the DDA to arrange a satisfactory resettlement of displaced persons in Dandakaranya even after a lapse of a long period. The Committee feel that even at this stage it is necessary to have an independent review of the working of the DDA in order to strengthen it to be able to fulfil speedily the object for which it was set up". At the end of December 1979 the Ministry of Supply and Rehabilitation expressed the hope that it would be possible for the project authorities to complete the task of rehabilitation of the remaining families "within the next 2 to 3 years". The statement that the project has been completed thus comes as a surprise.

Up to 1979, at an expenditure of Rs 100 crores the Dandakaranya project settled 19,647 families (about one lakh persons), established 386 villages, reclaimed 1,66,660 acres of land for homstead, agriculture and various other purposes, established 296 primary, 31 middle and eight higher secondary schools, 17 medical institutions (five hospitals, five primary health centres, four mobile units and three dispensaries), constructed 308 village tanks, 347 head-water tanks, 483 masonry wells and 1,750 tubewells, 561.40 km of main roads, 821.75 km of link roads, 405.38 km of internal roads and 295.40 km of tribal roads, and executed irrigation projects wtih a command area of a little over two lakh acres.

In December 1980 the Estimates Committee reported lack of progress in the distribution of *pattas* to the settlers in the Umerkote Zone and it expressed the view that "the matter is not being dealt with a sense of urgency that it deserves". Electrification of the villages in the resettlement area, although considered an essential element for the development of the area, was not done, despite an earlier recommendation of the Committee, asking the DDA to draw up a time-bound programme for electrification. Out of 227 villages in Orissa and 154 villages in Madhya Pradesh only eight villages had been electrified by December 1980. Further the Potteru irrigation project, which was originally scheduled to be completed by 1978-79, is not expected to be completed before 1982.

The settlers are exposed to the scourge of forcible cutting of their crops and encroachment upon their land by the tribals. A voluntary organisation, Tagore Society, under the initiative of Mr Pannalal Dasgupta has started working in the area to promote understanding and cooperation between the tribals and the settlers, according to the statement of the Ministry. It is to be hoped that the two state governments of Orissa and Madhya Pradesh would also support activities toward this end of amity between the settlers and the tribals.

Subhash Chandra Sarker

Money

Project monitoring by financial institutions

TERM lending financial institutions take great risks as development institutions. They try to share the rosy prospects of the enterprise along with the promoter entrepreneurs They have their basic norms that cover four major areas. Promoters' equity and debt-equity ratio, and margin on the value of the assets and the capacity to service the debt. The hopeful entrepreneurs struggle to convince the financial institutions that they actually satisfy and will continue to satisfy these norms. The institutions apply very strict standards in assessing the prospects for the enterprise in order to ensure that the strict norms will help them weed out risky and half-baked projects from the potentially viable ones.

In making these assessments, the assessing teams consisting of financial, technical and economic experts make several assumptions regarding the meaning, significance, consequences and implications of the sanction which they may give. In other words, the appraisal wings of the sanctioning authorities draw up in their own minds, and perhaps on paper too, an implementation schedule or a critical path for the completion of the project they sanction.

These assumptions and implications are very useful tools and significant means in regulating the growth of the project and ensuring its completion. Anyone who follows up the project, surveys its progress and wants to assess its implementation can do so very effectively with the help of these tools and means. They serve as reference guides and markers in the uncharted course of project implementation.

But in practice no one makes any use of these tools. They remain with the appraisal wings of financial institutions while the follow-up, inspection, disbursement and monitoring are passed on to the other wings of the lending agency. Often they are very competent people, but they lack the background that the appraising wing has when it sanctioned the project.

In the circumstances, the task of monitoring project implementation of enterprises financed by the leading development banks becomes either mechanical or meaningless. Their objective degenerates into a mere verification of assets created and satisfaction of having a physical security to support the loan.

Project monitoring quality can improve and lead to better results if the people responsible are provided with better means and more effective tools, better and more effective guidelines and a new perspective. This means several new things. First, every time an appraisal is completed, the appraising officers should record the assumptions on which they have cleared the project and the implications of sanction they have in mind. Second, at the time of sanction, usually it is the financial institution officials who prepare the implementation schedule and very often the borrower has no say or relevance. It would give much better results if the borrower is requested to sit with the appraising team at the time of sanction and the implementation schedule is extracted out of the borrower's own mind. This interview would be very helpful in telling the financial institutions whether the borrower has done his homework adequately and is ready to implement the project or not. Thirdly, the entire perspective of project monitoring has to be changed from policing inspection at the worst to technical assessment at the best. Monitoring is a total financial assessment of the progress made so far. An evaluation of the relationship between assets and liabilities, between production and income earning potential. What is required is not a chartered accountant's certificate of assets being created and charged, or of his having brought in his capital, but the analysis of the complete balance sheet every quarter or every alternative month to understand the implications of the progress.

S. G. Shah

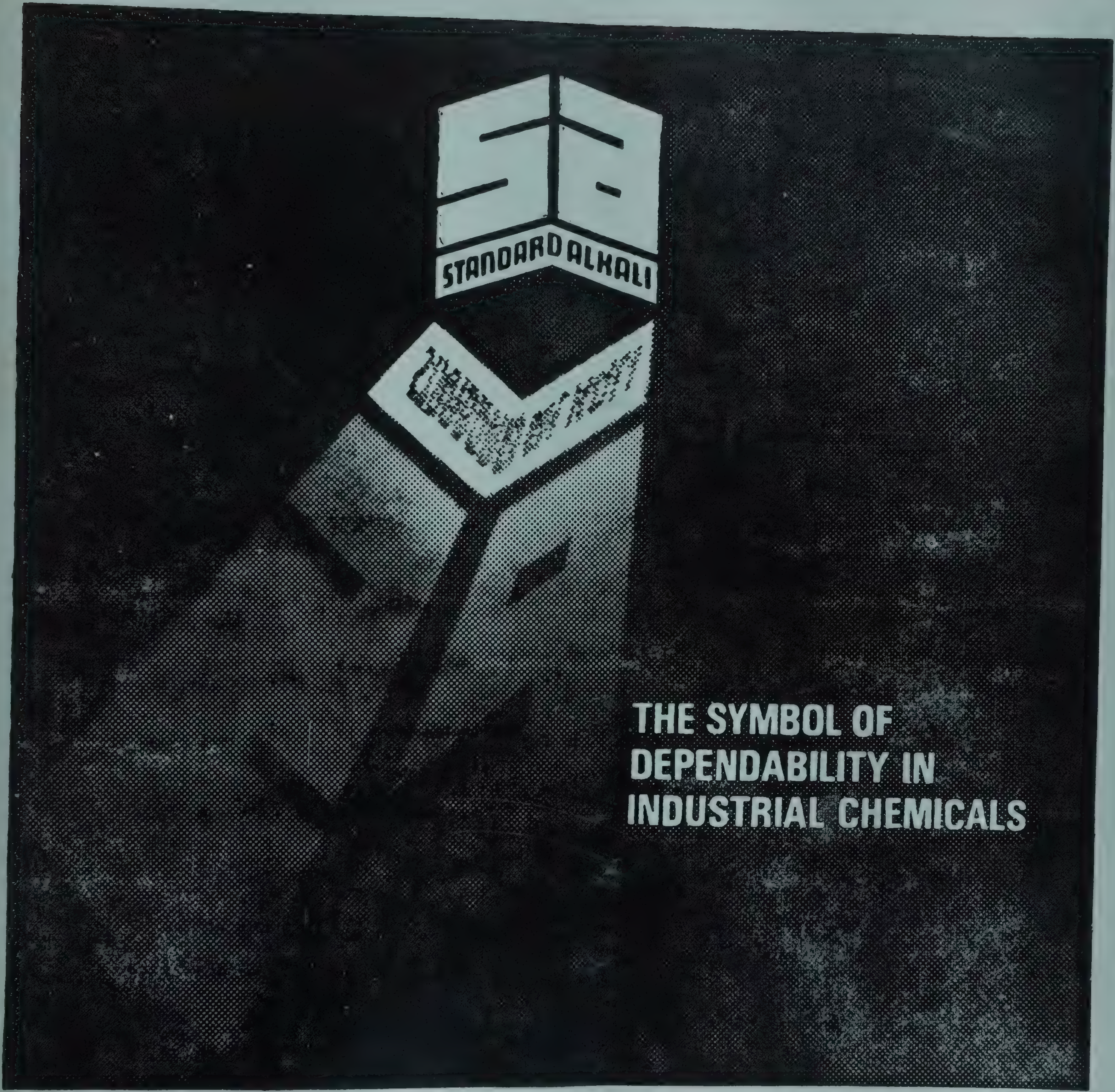
in 1979-80 at Rs 731 crores accounted for 41.6 per cent, a major portion of the rise in gross capital formation The plant and machinery component which accounted for 69 per cent of the increase in gross fixed assets in 1979-80, witnessed a rise of 10.8 per cent. Inventory accumulation in 1979-80 amounted to Rs 666 crores as against Rs 346 crores in 1978-79 and Rs 104 crores in 1977-78. This was mainly responsible for the substantial increase in gross capital formation in 1979-80. The ratio of inventory to sales rose from 26.3 per cent in 1978-79 to 29.1 per cent 1979-80. The bank borrowings as per cent of inventories declined steadily from 55.1 per cent in 1976-77 to 45.7 per cent in 1979-80 reflecting lower dependence on bank credit for inventory build-up probably as a result of the tightening of bank credit to the organised industry.

As much as Rs 575 crores or 32.7 per cent of the gross capital formation was financed from internal sources comprising depreciation provision and reserves and surplus, with depreciation provision alone accounting for Rs 324 crores or 18.4 per cent of the total funds obtained. The share of reserves and surplus in the total sources which had declined from 12.8 per cent in 1975-76 to 3.2 per cent in 1976-77, witnessed a reversal of trend by a rise of 9.2 per cent in 1977-78. This share almost doubled to 17.2 per cent in 1978-79, but dropped to 14.3 per cent in 1979-80. Reserves and surplus increased by Rs 324 crores in 1979-80 over and above that of Rs 294 crores in 1978-79 thereby reflecting improved profitability and enhanced plough back in the sample companies. Despite the increase in reserves and surplus, equity-debt ratio declined from 72:28 in 1978-79 to 70:30 in 1979-80.

Bombay spot exchange rates of currencies as on 31-8-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.50	9.70
Austria	A. Schilling	188.00	194.00
Belgium	B. Franc	443	452
Canada	C. $	13.15	13.61
Denmark	D. Kroner	84.80	86 20
France	Franc	64.90	65 00
Hong Kong	H.K. $	65 90	66.90
Italy	Lira	13 560	13,740
Japan	Yen	2510	2560
Malaysia	M. $	25 80	26.60
Netherlands	Guilder	29 90	30.40
Norway	N. Kroner	67.30	68 40
Singapore	S. $	23.60	24.30
Sweden	S. Kronor	57.90	59 00
Switzerland	S. Franc	23.40	23 90
UK	£	5.9960	6.0475
USA	$	10 06	11.26
West Germany	D.M.	26.90	27.40



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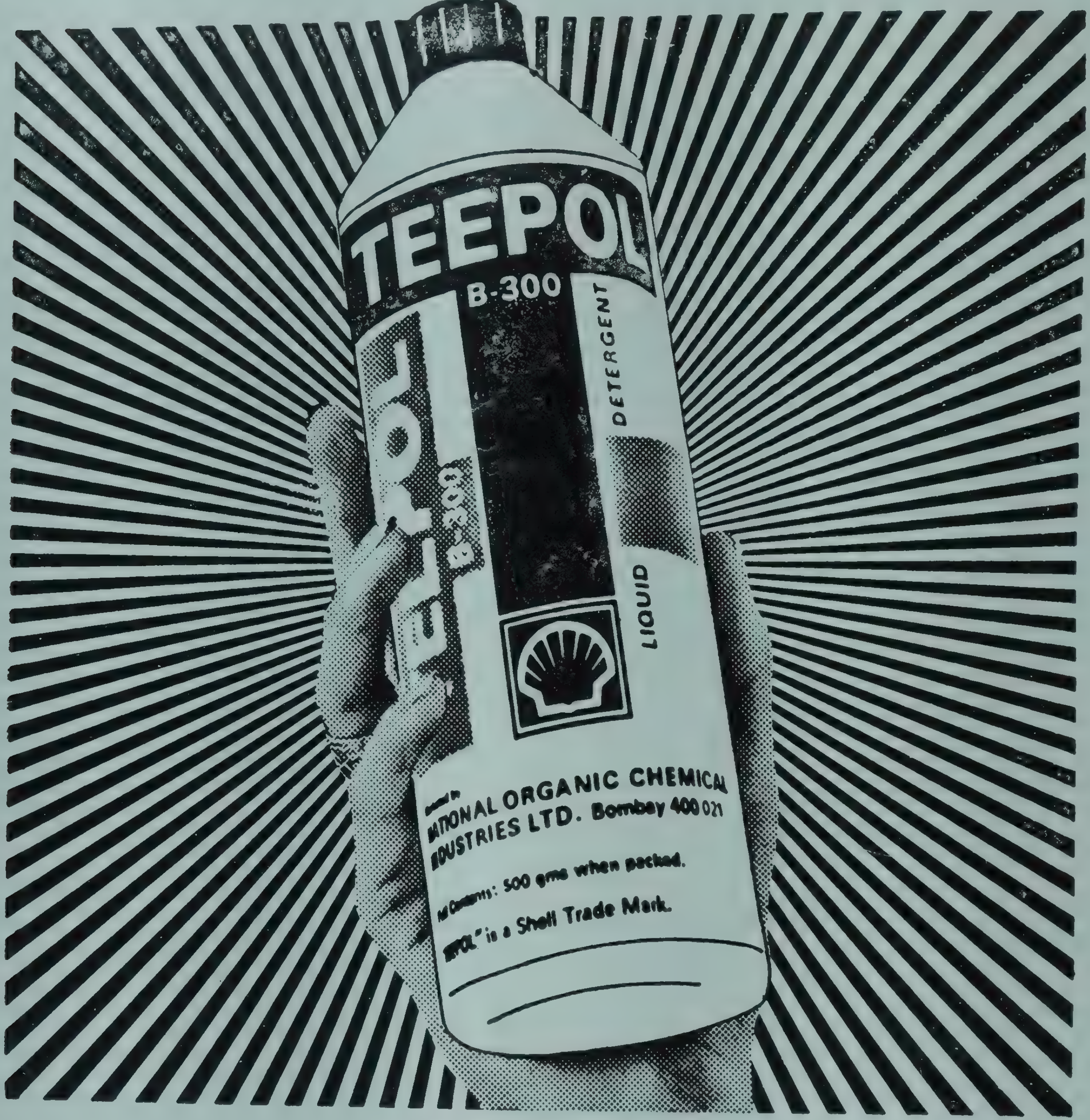
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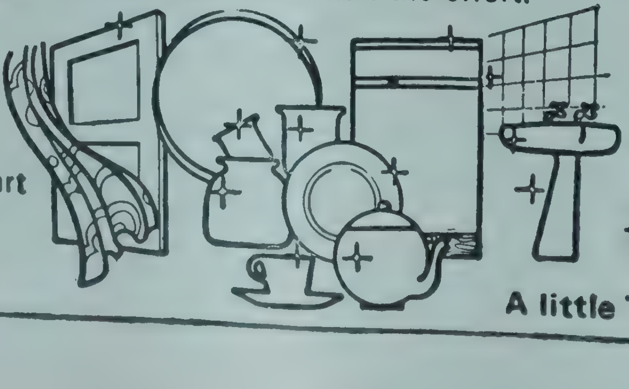

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CHAITRA-NOC-108

Exports of the 236 sample companies increased by 9.6 per cent to Rs 639 crores in 1979-80 from Rs 583 crores in 1978-79. Foreign exchange earnings of these companies increased by Rs 62 crores to Rs 670 crores in 1979-80 *i.e.*, 10.3 per cent. In contrast, foreign exchange expenditure of the sample companies went up by Rs 150 crores or 31.8 per cent from Rs 471 crores in 1978-79 to Rs 621 crores in 1979-80 causing thereby a decline in net foreign exchange earnings by Rs 88 crores to Rs 49 crores.

Castro's ghost at North-South dialogue

By A SPECIAL CORRESPONDENT

SO at the October summit of representative of rich and poor countries the United States is in, and Cuba is out. For about a year, the question of who should be invited has baffled the co-sponsoring leaders of Mexico and Austria. It got as difficult as the details of the agenda after Mr Reagan became President in the United States. He was not sure if he would like to attend. He was opposed to the presence of President Fidel Castro of Cuba — a fact which President Jose Lopez Portillo found so inconvenient because Cuba has done as much to cooperate with Mexico as it has to come into conflict with the United States. But without the United States, the International Meeting on Cooperation and Development — to give the Mexican summit the name christened in the report of the Brandt Commission — would lose its point and purpose.

It is to Cuba's credit that it has seen Mexico's dilemma. It has now come to its help as a friend by opting out of the meeting. Whatever the ways of repression, violence and subversion to which Cuba is wedded according to reporters who do not all belong to CIA, there is no doubt it could be a chastening experience for Cuba to have been invited to Mexico. Recently Janez Stanic, a Yugoslav journalist, wrote in *Communism's Crossroads* about Cuba's "burning desire for a messianic role in the world." Visions of this role and politico-economic relations with the Soviet Union have exacted of Cuba a heavy price in the past twenty years of economic mismanagement and stagnation. American "colonialism" has nothing to do with two decades of the downhill path Cuba's economy has taken, after Castro took over not only the commanding heights of the economy but the much smaller hills as well.

The "revolution" did away with small businesses, tiny shops and street

BUSINESS OPINION

THERE is a good potential for considerably expanding India's engineering exports to Cuba through a tripartite arrangement involving the Soviet Union, according to Mr P. M. S. Malik who was till recently India's Ambassador to Cuba. Addressing a meeting of the members of Association of Indian Engineering Industry in Bombay, he said that while the volume of direct visible trade to Cuba was very small, considerable exports to Cuba were taking place through third countries. For example, hand tools valued at over $ 1 million were being exported through UK and West Germany. Similarly, equipment for projects were going in through the USSR. India's engineering exports to Cuba could be easily stepped up to $ 15 million to 20 million per annum through a tripartite arrangement involving the Soviet Union, Mr Malik felt. Besides wishing to purchase Indian engineering products for use in Cuba itself, the Cuban organisations would be interested in procuring Indian goods and services for third country projects in which Cuba was involved.

One of the major inhibiting factors to a quicker growth of the Indo-Cuban trade has been the vast communications gap between the two countries. Cuba, till very recently, has had very little exposure to India's industrial growth in general and the engineering industry's capabilities in particular. This trend has been altered somewhat and some Cuban buying organisations have been to India to discuss with Indian manufacturers the potential for supplying plant and equipment to Cuba. A Cuban delegation had also visited the Indian Engineering Trade Fair and was highly impressed with the state of the engineering industry in the country today. Of late, Cuba has also shown interest in developing economic ties with India. This would encourage collaboration agreements being entered into between Cuban organisations and Indian firms. Areas in which such collaboration could be fruitfully entered into were sugar machinery, machine tools etc.

Mr Malik cautioned Indian engineering companies against looking at Cuba or any other Latin American market as a "quick return" market. It was important to adopt a selective approach to a few markets and India's presence ought to be registered in these countries through regular visits by Indian engineering company representatives. Cuban purchase organisations should also be invited to visit various specialised fairs in India, such as the Indian Machine Tool Exhibition which is scheduled to be held in Bombay in February 1982. Mr Malik clarified that, while generally shipping to Latin America was a problem, Cuba would not pose a similar problem as importers in Cuba were willing to accept supply of Indian engineering goods C & F Rotterdam basis.

MR H. B. Gupta, president, All India Small Scale Bright Bar Manufacturers' Association, has stressed the need to reduce the prices of iron and steel rounds used by the bright bar industry. The February 9 decontrol of mild steel rounds and the subsequent increase by the main producers in the prices of rounds by over Rs 1,200 per tonne, he points out, has only resulted in large quantity of rounds lying unlifted at the producers stockyards. The prices should, therefore, be fixed at a level bearable by consumers. Mr Gupta has also urged SAIL to abolish the extra of Rs 50 per tonne charged in the case of bright bar sizes. He observed that certain sizes like 14 mm, 20 mm, 36 mm, 40 mm, 42 mm and 45 mm had not been allotted to the bright bar industry for a long time and had become unavailable. Therefore, the main producers should undertake rolling of these sizes and supply them to the industry at the earliest. He also called upon TISCO and IISCO to supply squares which are necessary inputs. Despite these constraints, the industry had satisfactory progress during the last year and Mr Gupta hopes that with the adequate supply of raw materials being made this year, the industry would show further progress.

vendors. It placed the politically reliable but managerially incompetent at the helm of large nationalised enterprises. Between 1960 and 1978, Cuba has had an annual growth rate of *minus* 1.2 per cent per capita. From being one of the five richest Latin American states in 1959, today it is one of the poorest — with an yearly per capita national income lower than of Jamaica and Colombia. Had he been accommodated as a participant, President Castro would have learnt something worthwhile about economic growth, development and welfare.

Also, for the education of President Reagan, the Brandt Summit holds good promise. Already, at Ottawa, he too had to pay a price in agreeing to be present at the Mexico meeting. In spite of his known antipathy towards the United Nations, he agreed "to participate in preparations......for global negotiations" on the major issues of food security, trade expansion, energy exploration and balanced consumption, and developmental aid from the rich to the poor. Nobody will grudge the American officials their childish claim that President Reagan "walked away with all the prizes" from Ottawa. He did not. He has learnt that there is a price the United States will have to pay to belong to the comity of civilised nations. It is to extend the hand of cooperation and to see the suicidal folly of a policy of confrontation and stalemate.

Nevertheless, it is too early to say that the Mexico meeting will, as the Brandt Report has hoped, "launch ideas for a world economic recovery programme and enlarge prospects for global agreement." Obviously world summits do not solve all the world's problems. These can be tackled only when self-reliant endeavour is linked with international cooperation. But the summit decisions will need to be bold and imaginative, as well as down-to-earth, in paving the way to a more equitable distribution of the world's wealth. Including eastern Europe, North today hogs four-fifths of the world's income for its population which is a quarter of the global population. South, China included, has to make do with a fifth of the world's wealth for the remaining three-fourths of the population. This is an untenable situation since it militates against peaceful coexistence. The ways to remedy this worsening situation are well known and it will be the task before the participants at the Mexico meeting to forge the political will needed to take the remedial steps.

PLASTICS

Higher raw material costs

BOMBAY

THE plastics industry has been a major victim of the increase in prices of petroleum products. Labour unrest has also affected both raw material plants and processing units in the industry as was disclosed by Mr Dilip Piramal in his presidential speech at the 35th annual general meeting of the All India Plastics Manufacturers Association (AIPMA). The closure for the past six months of the polystyrene plant of Polychem Ltd. without any settlement in sight, has caused great hardship to many small scale plastic factories. In fact, many more plastic units in Maharashtra have been closed on account of labour problems.

In this situation, though the industry would stand to derive some comfort from the Government's decision to reduce the import duty on high density polyethylene from 155 per cent to 134.34 per cent, it is irked that the Government at the same time should have chosen to increase excise duty on this raw material from 27 per cent to 35 per cent. The AIPMA says that the excise duty on thermoplastic raw materials should not be more than 20 per cent, and has, therefore, urged the Bureau of Industrial Costs and Prices to make a thorough study of the price structure of various raw materials with a view to fixing a reasonable price. Recently two major manufacturers have slashed their prices. Polyolefins Industries reduced the basic price of high density polyethylene from Rs 15,778 to Rs 13,412 per tonne, while Indian Petrochemicals Corporation slashed LDPE from Rs 19,500 to Rs 16,500 per tonne.

Operations of many chemical industries, including plastics, have been affected in recent months by the poor availability of industrial alcohol. Among those affected are the low density polyethylene plant of Alkali and Chemical Corporation of India at Calcutta and the PVC plant of Chemicals and Plastics India in Tamil Nadu. The All India Alcohol based Industries Association has also drawn the Government's attention to this severe crisis and suggsted certain remedial measures, such as the rational distribution of alcohol, restriction of alcohol for potable purposes and fuller utilisation of distillery units' installed capacity.

Current estimated demand for plastic raw materials

Low density polyethylene	..	1,00,000 tonnes
High density polyethylene	..	65,000 ,,
PVC resin	..	1,00,000 ,,
Polypropylene	..	35,000 ,,

The AIPMA has, meanwhile, termed the Government's decision to subject alcohol-based LDPE and PVC resin units to higher rates of excise duty as highly discriminatory. It has urged a uniform rate of excise duty for both naphtha based and non-naphtha based plastic raw materials. It has also drawn attention to the indiscriminate imports of polyurethane leather cloth under OGL which has greatly affected the local leather cloth industry. It has urged the Government to slash the excise duty on thermosetting

Production of plastics raw materials (tonnes`

Products	1977-78	1978-79	1979-80
M.F. moulding powder	180	178	190
P.F. moulding powder	4,378	4,236	4 639
U.F. moulding powder	2,226	2,497	2,923
C.A. moulding powder	990	765	828
Polyethylene L.D.	18,451	56,010	71,716
Polyethylene H.D	25,585	28,073	24,748
Polystyrene	13,569	14,474	12,036
PVC Resins	59,023	62,643	51,575
Polypropylene	—	8,515	14,178

Imports of plastics raw materials

(Qty. in tonnes. Value in Rs lakhs)

Products	1977-78		1978-79		1979-80	
	Qty.	Value	Qty.	Value	Qty.	Value
C.A. moulding powder	245	16.0	328	14	51	3
P.F. moulding powder	302	17.0	81	5	115	8
Polyethylene LD	35,287	1,852.0	27,742	1,291	1,700	129
Polyethylene HD	22,997	1,320.0	26,178	1,378	25,924	1,527
Polystyrene moulding powder ..	536	31.0	1,062	63	403	24
PVC resins	8,207	394.0	6,093	340	26,635	2,042
U.F. moulding powder	35	3.0	10	2	—	—

plastics, including polyester resin, to protect the local industry from extinction.

Despite all these odds, consumption of polypropylene has picked up to a great extent. The current production of polypropylene is around 20,000 tonnes. This is insufficient to meet growing demand estimated at 32,000—35,000 tonnes. Though actual users are allowed to import polypropylene, the high rate of duty at 191.10 per cent *ad valorem* makes the landed cost quite prohibitive. The AIPMA has pervailed upon the Government to reduce the duty to the same level as borne by HDPE. It has also taken up the case for reduction of import duty on engineering plastic raw materials at the meeting of the Development Council for Organic Chemicals. The support of the Petroleum and Chemical Ministry has also been sought for reducing the duty to 45 per cent, as in the case of the electronics industry. This should encourage the consumption of important engineering plastic raw materials such as poly acetal, PPO, polycarbonate, PTFE, Nylon 66.

The *Economic Survey* 1980-81 has recorded a negative growth rate for chemical industries including plastics for the year 1979-80. Plastics has had a negative growth rate of 8.5 per cent during 1979-80 over the previous year. Many suggestions have been made to stop the rot in the industry. Some of these are : rationalisation of the excise duty concession to small scale units, reduction of excise duty on plastic raw materials made from non-naphtha based feed stock, duty reduction for thermosetting resins and epoxy resin and reduction of import duty on polypropylene and engineering plastics raw materials.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on Aug. 24, 1981)

	High	Low	T.T.
Australian $	6.81	6.74	6.9355
Belgian Franc (100)	14.00	12.60	15.160
British £	11.20	10.70	11 270
Burmese Kyat (100)	25.00	15.00	
Canadian $	4.90	4 83	4.97
French N.F.	0 995	0.96	1.0270
Indian Rupee (100)	58 00	54.00	68.15
West German DM	2.41	2.325	2.4520
Indonesian Rupiah (100)	0.90	0.80	
Italian Lira (100)	5.00	4.70	
Japanese Yen (100)	2.605	2.565	2.6390
Korean Won (100)	0.88	0.78	
Malaysian $	2.52	2.48	2.5280
Netherlands Guilder	2.17	2.13	2.2105
New Zealand $	4.90	4.70	5.0460
Pakistan Rupee (100)	4.30	3.80	6 225
Philippine Peso	0.72	0.70	0.7620
Singapore $	2.75	2.72	2.7700
South African Rand	5.70	5.30	6.3755
Sri Lanka Rs. (100)	30.00	22.00	
Swiss Franc	2.78	2.72	2.8345
Taiwan $ (100)	15.20	15.00	
Thai Baht (10)	27.50	26.50	

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	Aug. 8 1981	Aug, 1 1981	July 11 1981	Aug. 9 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	275.5	274.0	274.0	264.8	0.5	0.5	4.0	28.4
Primary articles	272.6	272.8	268.7	235 8	—0.1	1.5	15.6	30.3
Fuel, power, lubricants etc.	428.7	428.7	425.0	355.7	—	0.9	20.5	58.1
All commodities	287.2	286.6	284.6	260.4	0.2	0.9	10.3	32.3

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	Aug. 14 1981	Aug. 7 1981	July 17 1981	Aug. 15 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,593	58,508	58,307	49,155	0.1	0.5	19.2	37.9
Bank credit	26,775	26,843	26,733	22,008	—0.3	0.2	21.7	36.9
Aggregate deposits ..	40,708	40,556	40,543	33,603	0.4	0.4	21.1	40.8
Foreign exchange reserves(a)	4,891	4,856	4,856	5,859	0.7	0.7	—16.5	—13.9

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	June 1981	145 9(a)	145.5 (a)	0.3	14.0
Exports	Rs. crores	May 1981	383	627	—38.2	—15.7
Imports	Rs crores	May 1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May 1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	July 1981	4,856	4,856	—	—6.7
Wholesale price Index ..	1970-71=100	July 1981	283.7	278.3	1.9	13.6
Consumer price Index for Industrial workers ..	1960=100	June 1981	439	433	1.4	13.6
Unemployment(d)	Lakhs	Feb. 1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110,9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3.3	14.9
Imports	Rs crores	12,210	8,908	2,955	37.1	22.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)..*	Rs crores	55,221	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.8	217.6	139.7	18.0	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	lakhs	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

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[illegible]

ICF coaches for Calcutta tube railway

MADRAS

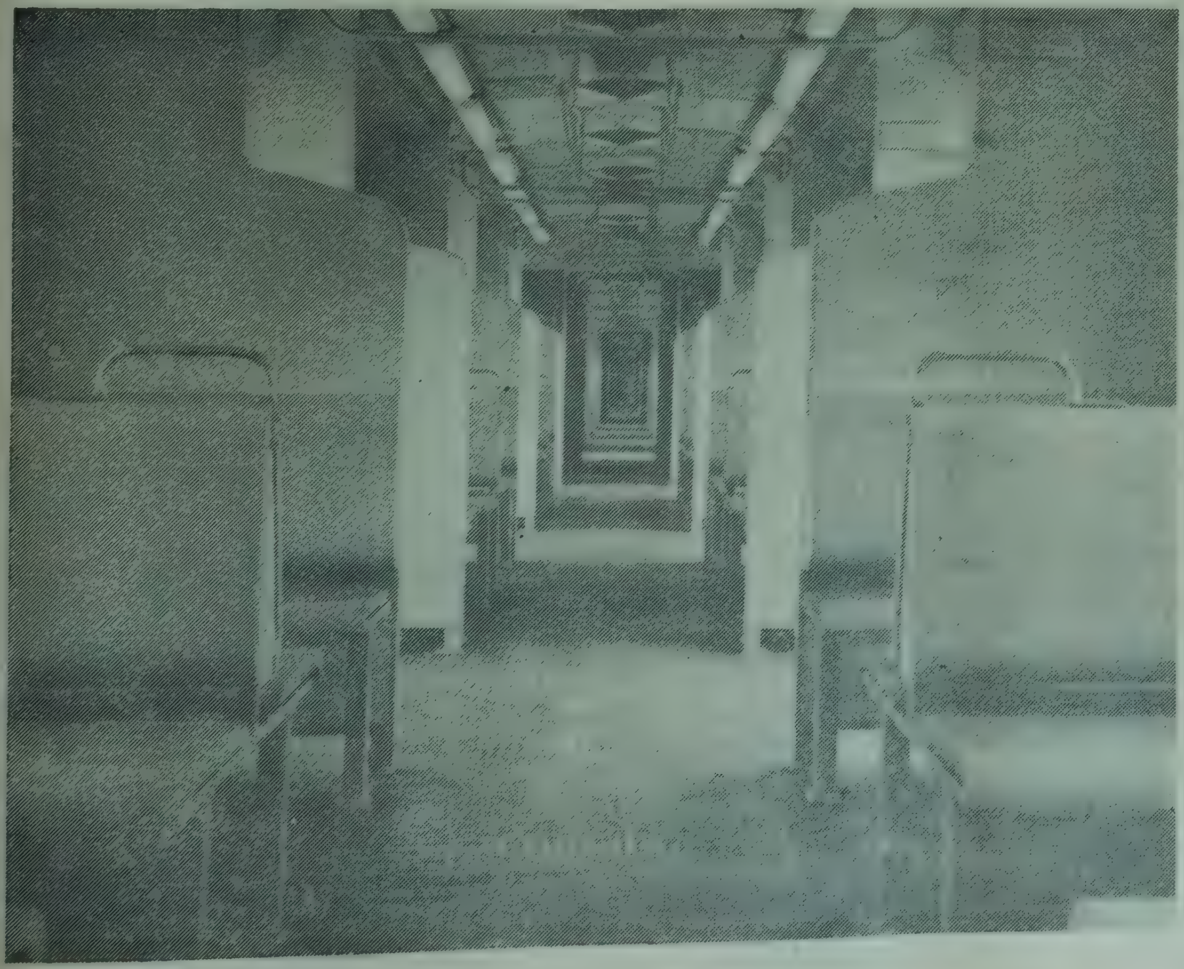
THE first four Metro coaches manufactured by the Integral Coach Factory (ICF), Perambur near Madras, for India's first underground railway will soon leave for Calcutta. The Metropolitan Transport Project, Calcutta, where the first underground rapid transit system of the country is taking shape has placed an order on ICF for the design and manufacture of 144 coaches required for the section.

Though original plan was to go in for foreign collaboration, the Railway Board later decided to entrust this challenging task to the ICF which has considerable experience in constructing over seventy types of coaches not only for the Indian Railways but also for export markets.

Of the 144 coaches on order, two trains comprising 8 coaches each have been programmed to be turned out as prototype trains to be run in a test section between Dum Dum and Belgachia, a distance of 1.5 km. The first prototype train has electrical traction equipment supplied by Bharat Heavy Electricals Ltd, Bhopal, and for the other train these will be supplied by NGEF, Bangalore.

ICF-built metro coaches for Calcutta underground railway

The metro coaches will be different from conventional electrical multiple unit coaches and suburban trains. The metro trains will be fully vestibuled. The control circuit is so designed that unless all doors of the train are closed the train cannot be started. A public address system will be provided to announce approaching stations. A special type of signalling system will indicate the track position ahead in the cab itself with an automatic feature to apply the brake if the driver fails to observe speed limits. There is also a proposal to introduce automation later. After trial runs in the next few weeks, the ICF will take up production of series coaches on schedule.



Metro coach interior

The Metropolitan Transport Project, Calcutta, has, in the first instance, taken up execution of the tube railway between Dum Dum and Tollygunj with a double track railway covering a distance of 16.43 km. While a 1.5-km stretch from Dum Dum will be on surface, the remaining will be underground except for a small stretch at Tollygunj. The railway will have 17 stations, the average intersection distance being 1.02 km. Eight car trains will run initially at two minute intervals, but it is hoped to increase the frequency later to 90 seconds headway. Each coach is 19.5 metres long and 2.75 metres wide with a capacity of about 300 passengers. Maximum speed will be 80 kmph. So much sophistication in design and manufacture has been attempted for the first time in our country without foreign technical help.

The current year's programme of the ICF envisages production of 720 coaches of a sophisticated product-mix comprising 108 electric multiple units, 16 metro coaches, 90 air-conditioned coaches including 10 metre guage air-conditioned sleeper and 30 brake vans for export to Nigeria, besides conventional coaches.

CORPORATE SECTOR

In the market

Hathwa Metals & Tubes

Hathwa Metals & Tubes Ltd (Registered Office: Hathwa House, Patna-800 001) is offering for public subscription at par 11.40 lakh equity shares of Rs 10 each totalling Rs 1.14 crores. The subscription list, which opened on September 3, will close on September 14.

The company proposes to set up a Rs 6.10-crore project to manufacture 1,200 tonnes per annum of copper and copper alloy pipes and tubes.

Other developments

Hindoostan Spg: Modernisation apace

Though sales of the Hindoostan Spinning and Weaving Mills Ltd increased 19 per cent from Rs 60 crores last year to Rs 75 crores this year, profits fell from Rs 352 lakhs to Rs 292 lakhs. Even in the current year, according to the chairman, Mr Sudhir Thackersey, the picture is not rosy. He told the annual meeting that the textile industry was going through a period of cost push inflation. Wages had gone up by Rs 90 per person per month. Power and fuel costs had gone up. Cotton prices had also gone up by 25 to 70 per cent between November 80 and now.

Mr Thackersey disclosed that the company had completed the first phase of its modernisation programme and had scheduled the second phase for completion by 1983. In the current year, the company's second rotary screen printing machine would be commissioned. The company also proposed to increase its processing capacities.

The sales turnover of the company for the first four months of the year increased from Rs 24 crores to a little over Rs 26 crores. The company's exports this year are marginally less than last year's figure of Rs 13.25 crores. Exports to the EEC and USA have come down considerably. The company has taken steps to increase exports to other areas.

Abhyudaya Coop Bank: Good progress

Abhyudaya Co-op Bank Ltd., has registered good progress during 1980-81 and has emerged as one of the six leading urban co-operative banks in the country.

The deposits of the bank crossed Rs 20 crores, 38 per cent over the previous year. This rate of growth has been maintained for the past four years. The bank has nearly 1.60 lakh depositors of whom 1.32 lakhs are savings account holders. The working capital of the bank has also shot up to over Rs 23 crores.

In regard to loans and advances also, the year 1980-81 has registered a net increase of Rs 3.26 crores in loans outstanding, thereby reaching a level of Rs 13.62 crores as on June 30, 1981. It is noteworthy that the credit deposit ratio of the bank was 67 per cent. The bank made a net profit of Rs 23.04 lakhs for 1980-81, a 50 per cent increase over the previous year. The bank proposes to maintain the dividend at 12 per cent.

The above progress has been achieved in spite of the fact that except for opening a branch at APMC Market, Turbhe, during the year, there has not been any branch expansion. With the obtaining of licences for opening three more branches, the bank looks forward to a more rapid growth in its operations in the following year. It has fixed an ambitious target of Rs 30 crores for deposits and Rs 20 crores for loans and advances for 1981-82.

Hindustan Brown Boveri: Sales rise

Sales and other income of Hindustan Brown Boveri Ltd for the year ended April 1981 increased to Rs 43.99 crores from Rs 38.55 crores in the previous year. The net profit, after providing Rs 1.66 crores (Rs 1.82 crores) for taxation, was Rs 2.23 crores (Rs 1.63 crores). The equity dividend recommended for the year under review is 17 per cent (16 per ment). An amount of Rs 13 lakhs (Rs 11 lakhs) is transferred to investment allowance reserve. The company has orders on hand worth Rs 82 crores.

Mukand Iron and Steel: Debenture issue proposed

Mukand Iron & Steel Works Ltd has reported higher sales for the year ended June 1981 at Rs 110.34 crores compared to Rs 78.91 crores in the previous year. The net profit, after providing Rs 1.23 crores (Rs 1.04 crores) for depreciation and Rs 3.10 crores (Rs 2.15 crores) for taxation, amounted to Rs 3.02 crores (Rs 1.56 crores). The equity dividend recommended for the year under review is 15 per cent (12 per cent). An amount of Rs 41 lakhs (Rs 17 lakhs) is transferred to investment allowance reserve and Rs 1.45 crores (Rs 49.61 lakhs) to general reserve. The company proposes to issue convertible debentures of Rs 7 crores subject to necessary approvals. The proceeds of the issue will be used for partly financing the company's modernisation programme costing Rs 20 crores.

Forthcoming company meetings

SEPTEMBER 5 TO SEPTEMBER 11

UNITED NILGIRIS TEA ESTATES COMPANY LTD, 8/23-24, Race Course Road, Coimbatore 641 018 (Tamil Nadu), (*Sept.* 7, 11 *a.m.*)

EASTERN CACHAR TEA COMPANY LTD, 9, Brabourne Road, Calcutta-700 001. (*Sept.* 7, 12 *p.m.*)

CELLULOSE PRODUCTS OF INDIA LTD, Premabhai Hall, Bhadra, Ahmedabad-380 001, (*Sept.* 8, 10 *a.m.*)

SURAT ELECTRICITY COMPANY LTD, M. C. Ghia Hall, Bhogilal Hargovindas Building, 18/20, K. Dubash Marg, Bombay-400 023. (*Sept.* 8, 3 *p.m.*)

INDIAN PLASTICS LTD, Century Auditorium, Century Bhavan, Dr Annie Besant Road, Bombay-400 025. (*Sept.* 8, 4 *p.m.*)

CHOWGULE STEAMSHIPS LTD, Chowgule House, Mormugao Harbour, Goa. (*Sept.* 10, 10 *a.m.*)

LAKSHMI MILLS COMPANY LTD, 348, Avanashi Road, Pappansaickenapalayam, Coimbatore-641 037 (Tamil Nadu). (*Sept.* 10, 3.15 *p.m.*)

RANE (MADRAS) LTD, New Woodlands Hotel, Mylapore, Madras-600 004, (*Sept.* 11, 10 *a.m.*)

PARRY AND COMPANY LTD, Dare House Extension, Parry's Corner, Madras-600 001. (*Sept.* 11, 10 *a.m.*)

PNB FINANCE LIMITED, 7, Bahadur Shah Zafar Marg, New Delhi-110 001. (*Sept.* 11, 11 *a.m.*)

The names of the companies appearing in the table on financial analysis of operations of non-financial companies, published on page 402 of *Commerce* dated August 29, 1981, have appeared wrongly and the data relate, respectively, to Ennore Foundries, Fit Tight Nuts & Bolts, Metal Box India, Shivaji Works and Usha Alloys and Steels. We republish the correct table on page 443.

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Ennore Foundries		Fit Tight Nuts & Bolts		Metal Box India		Shivaji Works		Usha Alloys & Steels	
Industry Group	Metal Products		Metal Products		Metal Products		Metal Products		Metal Products	
	Year ended December		Year ended September		Year ended September		Year ended December		Year ended May	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1980	1981
Liabilities (at the end of the year)										
1. Net worth (i+ii)	535.8	619.6	277.8	319.6	1,812.0	1,958.5	178.9	230.8	238.8	362.7
(i) Paid-up capital (a+b)	282.8	282.8	146.4	146.4	694.1	694.1	80.1	84.6	144.0	144.0
(a) Equity	282.8	282.8	134.4	134.4	664.1	664.1	71.1	75.6	114.0	114.0
(b) Preference	—	—	12.0	12.0	30.0	30.0	9.0	9.0	30.0	30.0
(ii) Reserves	253.0	336.8	131.4	173.2	1,117.9	1,264.4	98.8	146.2	94.8	218.7
2. Borrowings (i+ii)	30.1	209.5	330.2	316.5	3,285.9	4,319.4	182.1	289.8	288.7	390.7
(i) Long-term	5.1	184.7	18.2	24.5	1,407.3	1,731.5	71.9	125.2	137.9	180.9
(ii) Short-term	25.0	24.8	312.0	292.0	1,878.6	2,587.9	110.2	164.6	150.8	209.8
3. Non-current liabilities and provisions	—	—	—	—	114.4	123.4	—	—	—	—
4. Current liabilities and provisions	251.2	220.1	191.6	206.5	1,419.3	1,835.3	142.5	180.8	152.7	481.8
Assets (at the end of the year)										
5. Gross fixed assets	691.2	899.8	591.4	698.1	4,078.2	4,919.2	343.3	485.9	383.8	516.8
6. Less depreciation	383.4	422.6	314.1	337.0	1,219.1	1,478.2	98.6	126.9	115.7	142.3
7. Net fixed assets (5—6)	307.8	477.2	277.3	361.1	2,859.1	3,441.0	244.7	359.0	268.1	374.5
8. Current assets (i+ii+iii)	509.3	572.0	522.0	481.2	3,741.2	4,767.5	257.4	341.0	412.1	860.7
(i) Inventories	182.5	188.3	284.9	203.1	1,983.7	2,495.7	111.4	120.6	227.5	639.0
(ii) Receivables and loans and advances	285.1	323.2	230.0	250.1	1,598.9	1,931.6	140.7	207.1	149.6	170.8
(iii) Others	41.7	60.5	7.1	28.0	158.6	340.2	5.3	13.3	35.0	50.9
9. Other assets	—	—	0.3	0.3	31.3	28.1	1.4	1.4	—	—
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**817.1**	**1,049.2**	**799.6**	**842.6**	**6,631.6**	**8,236.6**	**503.5**	**701.4**	**680.2**	**1,235.2**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,348.0	1,653.2	912.6	933.3	11,693.9	9,704.1	682.3	929.1	1,422.3	2,120.3
11. Increase in stock of finished goods and work in progress	31.8	-13.2	-5.1	-31.0	72.1	232.7	-10.3	6.9	-24.9	68.8
12. Value of production (10+11)	1,379.8	1,640.0	907.5	902.3	11,766.0	9,936.8	672.0	936.0	1,397.4	2,189.1
13. Other income	13.8	15.4	6.2	3.7	24.7	27.2	1.6	1.5	5.3	15.8
Expenditure										
14. Materials, stores and other mfg. expenses	687.1	892.8	492.6	419.1	7,635.3	6,577.8	342.6	517.0	1,102.6	1,775.5
15. Current repairs	86.4	102.8	9.0	9.2	123.0	104.4	19.1	32.6	6.6	7.5
16. Salaries and wages	235.9	264.0	171.3	181.4	1,894.0	1,535.7	140.8	173.0	67.2	88.1
17. Welfare expenses	22.5	24.7	6.1	13.4	138.0	129.6	7.3	8.3	10.5	15.1
18. Managerial remuneration	—	—	1.4	0.3	—	—	0.7	0.5	—	1.5
19. Other expenses	47.3	57.3	72.8	93.0	599.5	512.7	49.5	64.4	52.4	84.4
20. Depreciation	41.3	56.4	20.3	22.9	175.8	276.0	18.5	29.6	22.0	26.7
21. Other provisions	—	—	—	—	15.2	15.4	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	273.1	257.4	140.2	166.7	1,209.9	812.4	95.1	112.1	141.4	206.1
23. Interest	0.7	10.1	52.3	61.1	479.2	612.5	30.8	39.9	42.7	57.0
24. Tax provision	162.0	101.4	49.8	39.0	132.0	2.0	25.6	13.3	—	—
25. Profit after tax (22—23—24)	110.4	145.9	38.1	66.6	598.7	197.9	38.7	58.9	98.7	149.1
Appropriations										
26. Dividends (i+ii)	62.2	62.2	24.2	26.9	141.7	84.5	11.6	12.5	22.5	25.7
(i) Equity	62.2	62.2	22.9	25.6	139.5	83.0	10.6	11.6	11.1	22.8
(ii) Preference	—	—	1.3	1.3	2.2	1.5	1.0	0.9	11.4	2.9
27. Profit retained (25—26)	48.2	83.7	13.9	39.7	457.0	113.4	27.1	46.4	76.2	123.4
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,393.6**	**1,655.4**	**913.7**	**906.0**	**11,790.7**	**9,964.0**	**673.6**	**937.5**	**1,402.7**	**2,204.9**
Operational indicators (per cent)										
(a) Net worth/total net assets	65.6	59.1	34.7	37.9	27.3	23.8	35.5	32.9	35.1	29.4
(b) Inventories/net sales	13.5	11.4	31.2	21.8	17.0	25.7	16.3	13.0	16.0	30.1
(c) Operating profit/net sales	20.3	15.6	15.4	17.9	10.3	8.4	13.9	12.1	9.9	9.7
(d) Operating profit/total net assets	33.4	24.5	17.5	19.8	18.2	9.9	18.9	16.0	20.8	16.7
(e) Profit after tax/net worth	20.6	23.5	13.7	20.8	33.0	10.1	21.6	25.5	41.3	41.1
(f) Equity earning/equity capital	39.0	51.6	27.4	48.6	89.8	29.6	53.0	76.7	76.6	128.2
(g) Equity dividend	22.0	22.0	17.0	19.0	21.0	12.5	15.0	16.0	10.0	20.0
(h) Equity dividend coverage. (No. of times)	1.8	2.3	1.6	2.6	4.3	2.4	3.5	4.8	7.7	6.4
(i) Paid-up value per equity share (Rs.)	10.00	10.00	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	34.00	36.00	245.00	257.50	24.25	18.50	14.25	23.50	20.00	37.00
(k) Gross yield	6.5	6.1	6.9	7.4	8.7	6.8	10.5	6.8	5.0	5.4
(l) Gross fixed assets formation	10.0	30.2	1.8	18.0	67.3	20.6	20.3	41.5	5.5	34.7
(m) Debt/equity	0.01:1	0.30:1	0.07:1	0.08:1	0.78:1	0.88:1	0.40:1	0.54:1	0.58:1	0.50:1

NOTES : .. Category not applicable ... Amount/Percentage is negligible — Amount is nil N.Q. Not quoted N.A. Not available

calculated by making, wherever necessary, additions or deductions of various

Financial analysis of operations of non-financial companies

Complied by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Bihar Alloy Steels		Electrosteel Castings		Ferro Alloys Corporation		Mahindra Ugine Steel Company		Tata Iron and Steel Company	
Industry Group	Iron and Steel		Iron and Steel		Iron and Steel		Iron and Steel		Iron and Steel	
	Year ended December		Year ended September		Year ended December		Year ended December		Year ended March	
Item	1979	1980	1979	1980	1979	1980	1979	1980	1980	1981
Liabilities (at the end of the year)										
1. Net worth (i+ii)	423.9	606.5	447.8	512.6	912.0	1,013.9	1,850.7	2,096.3	15,096.0	16,886.0
(i) Paid-up capital (a+b)	799.8	799.8	80.0	80.0	282.3	402.3	628.5	628.5	6,284.0	6,284.0
(a) Equity	699.8	699.8	80.0	80.0	239.4	359.4	528.5	528.5	5.144.0	5,144.0
(b) Preference	100.0	100.0	—	—	42.9	42.9	100.0	100.0	1,140.0	1,140.0
(ii) Reserves	–375.9	–193.3	367.8	432.6	629.7	611.6	1,222.2	1,467.8	8,812.0	10,602.0
2. Borrowings (i+ii)	3,346.3	2,990.9	86.0	153.8	397.7	522.4	3,915.1	4,367.9	8,478.0	10.460.0
(i) Long-term	2,245.9	1,843.2	8.3	—	15.1	75.1	2,623.4	2,538.8	3,119.0	3,760.0
(ii) Short-term	1,100.4	1,147.7	77.7	153.8	382.6	447.3	1,291.7	1,829.1	5,359.0	6,700.0
3. Non-current liabilities and provisions	—	—	2.9	3.6	7.7	10.0	—	—	153.0	141.0
4. Current liabilities and provisions	394.1	377.8	121.3	218.7	857.9	908.3	983.7	1,268.9	16,160.0	19,298.0
Assets (at the end of the year)										
5. Gross fixed assets	3,319.7	3,336.4	522.4	584.5	1,314.2	1,390.3	5,140.1	5,186.5	49,970.0	55,048.0
6. Less depreciation	1,005.6	1,224.3	313.2	343.4	733.3	808.4	738.2	1,047.8	31,519.0	33,372.0
7. Net fixed assets (5—6)	2,314.1	2,112.1	209.2	241 1	580.9	581.9	4,401.9	4,138.7	18,451.0	21,676.0
8. Current assets (i+ii+iii)	1,839.7	1,854.7	448 8	647.6	1,586.4	1,791.9	2,347.6	3,585.7	20,854.0	24,331.0
(i) Inventories	1,363.6	1,460.9	169.7	286.1	1,083.3	1,031.3	1,756.0	2,788.2	14,219.0	16,903.0
(ii) Receivables and loans and advances	346.9	255.1	230.9	285.0	425.7	597.6	452.1	708.3	4,876.0	5,408.0
(iii) Others	129.2	138.7	48.2	76.5	77.4	163.0	139.5	89.2	1,759.0	2,020.0
9. Other assets	10.5	8.4	—	—	8.0	80.8	—	8.7	582.0	778.0
Total : Liabilities (1 to 4) or Net assets (7 to 9)	**4,164.3**	**3,975.2**	**658.0**	**888.7**	**2,175.3**	**2,454.6**	**6,749.5**	**7,733.1**	**39,887.0**	**46,785.0**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	3,684.0	3,844.7	1,009.4	1,469.7	3,051.0	3,477.5	2,300.9	4,722.7	38,513.0	44,008.0
11. Increase in stock of finished goods and work in progress	33.4	97.5	8.9	11.2	11.8	67.5	0.6	498.3	734.0	1,587.0
12. Value of production (10+11)	3,717.4	3,942.2	1,018.3	1,480.9	3,062.8	3,545.0	2,301.5	5,221.0	39,247.0	45,595.0
13. Other income	13.8	19.5	33.3	9.2	10.2	12.0	46.2	88.8	2,017.0	2,000.0
Expenditure										
14. Materials, stores and other mfg. expenses	2,532.9	2,829.6	764.4	1,025.4	1,776.9	1,909.0	1,410.7	3,561.7	13,756.0	17,157.0
15. Current repairs	37.6	35.7	10.6	14.6	206.8	199.5	63.3	88.7	3,328.0	3,617.0
16. Salaries and wages	191.6	233.2	110.8	132.7	266.7	292.3	220.1	276.5	8,560.7	9,566.5
17. Welfare expenses	8.9	17.9	4.7	6.0	48.1	67.5	24.6	34.8	469.0	470.0
18. Managerial remuneration	—	—	0.2	0.1	0.5	0.4	1.1	—	0.3	0.5
19. Other expenses	124.6	147.2	44.5	43.6	326.9	374.3	83.4	116.7	9,301.2	8,907.5
20. Depreciation	217.3	218.7	42.8	43.8	92.6	83.0	73.5	310.1	2,297.0	2,370.0
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	618.3	479.4	73.6	223.9	354.5	631.0	471.0	921.3	3,551.8	5,506.5
23. Interest	305.7	298.5	9.7	19.8	52.2	52.3	150.3	569.6	1,005.0	1,210.0
24. Tax provision	—	—	43.0	125.8	205.0	415.0	—	—	900.0	2,560.0
25. Profit after tax (22—23—24)	312.6	180.9	20.9	78.3	97.3	163.7	320.7	351.7	1,646.8	1,736.5
Appropriations										
26. Dividends (i+ii)	—	—	16.0	20.0	32.8	58.0	75.9	106.1	778.8	856.0
(i) Equity	—	—	16.0	20.0	28.7	53.9	65.2	95.1	694.4	771.6
(ii) Preference	—	—	—	—	4.1	4.1	10.7	11.0	84.4	84.4
27. Profit retained (25—26)	312.6	180.9	4.9	58.3	64.5	105.7	244.8	245.6	868.0	880.5
Total : Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**3,731.2**	**3,961.7**	**1,051.6**	**1,490.1**	**3,073.0**	**3,557.0**	**2,347.7**	**5,309.8**	**41,264 0**	**47,595.0**
Operational indicators (per cent)										
(a) Net worth/total net assets	10.2	15.3	68.1	57.7	41.9	41.3	27.4	27.1	37.8	36.1
(b) Inventories/net sales	37.0	28.0	16.8	19.5	35.5	29.7	76.3	59.0	36.9	38.4
(c) Operating profit/net sales	16.8	12.5	7.3	15.2	11.6	18.1	20.5	19.5	9.2	12.5
(d) Operating profit/total net assets	14.8	12.1	11.2	25.2	16.3	25.7	7.0	11.9	8.9	11.8
(e) Profit after tax/net worth	73.7	29.8	4.7	15.3	10.7	16.1	17.3	16.8	10.9	10.3
(f) Equity earning/equity capital	44.7	25.9	26.1	97.9	38.9	44.4	58.7	64.5	30.4	32.1
(g) Equity dividend	—	—	20.0	25.0	12.0	15.0	14.0	18.0	13.5	15.0
(h) Equity dividend coverage. (No. of times)	..	..	1.3	3.9	3.2	3.0	4.2	3.6	2.2	2.1
(i) Paid-up value per equity share (Rs.)	10.00	10.00	10.00	10.00	100.00	100.00	10.00	10.00	100.00	100.00
(j) Market price of an equity share (Rs.)	15.50	20.00	29.00	41.50	195.00	285.00	41.75	55.00	117.75	361.25
(k) Gross yield	..	..	6.9	6.0	6.2	5.3	3.4	3.3	11.5	4.2
(l) Gross fixed assets formation	0.7	0.5	5.0	11.9	5.8	5.8	19.4	0.9	6.1	10.2
(m) Debt/equity	5.30:1	3.04:1	0.02:1	..	0.02:1	0.07:1	1.42:1	1.21:1	0.21:1	0.22:1

NOTES : ..Category not applicable ... Amount/Precentage is negligible —Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making

EQUITIES

Diffident undertone

Bombay, August 28

There was a further decline in share prices during the week ended August 28 on renewed offerings and lack of fresh buying support. Marketmen restrained themselves from extending their commitments on fears of another anti-inflationary package. Activity was very much limited and the undertone was diffident.

For the major part of the week, equities encountered selling pressure. A worthwhile recovery was noted only on the concluding day of the week on emergence of support at lower levels coupled with the Finance Minister's assertion in the Rajya Sabha that there would be "greater deceleration" in the price level in the current financial year than last year.

In view of the continued weakness in pivotals, BSE took certain measures, apart from the removal of the daily margins on 10 scrips, by way of putting additional deposit margins on bears in the current account.

Century, which reacted sharply from the week's best level of Rs 821 to Rs 795.50, staged a rally on the final day of the week to close at Rs 805.50—indicating only a marginal net loss of Rs 2.50. Standard, however, dropped by seven points to Rs 520 and TELCO by 12 points to Rs 606 on renewed offerings.

SLM-Maneklal, which came in for heavy selling pressure in the preceding week following the discouraging performance for the year ended March 1981, plummeted further, by Rs 27.50 to Rs 170—a new low. Tata Steel and NRC declined by Rs 5.50 to Rs 344 and by Rs 5 to Rs 350. The other weak spots were Tata Chemicals, Tata Oil, ACC, Gwalior Rayon and Indian Dyestuff.

In the cash section, Bajaj Auto became the centre of selling following labour unrest at its plant and the likelihood of lock-out. The management has already put up a lock-out notice but it has been deferred at the intervention of the Maharashtra Government. The scrip slumped by 65 points to Rs 1,475. Despite the announcement two-for-five bonus issue and a record dividend of 42 per cent for 1980-81 against 27.5 per cent, Pond's also came in for profit-taking and the scrip lost 12 points. Caprihans was weak on passing over the dividend for 1980-81.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 22-8-81	High	Low	Closing quotations 29-8-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	222.50	220.00	210.00	210 00
Bombay Dyeing (25)	85.00cd	88.00cd	82.00xd	83.00xd
Central India (50)	60.00	60.00	58.00	59.00
Century (100)	808.00	821.00	795.50	805.50
Dawn (50)	73.00	75.00	74.00	74.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	107.50	110 00	105.00	110.00
Gokak (100)	203.00	204.00	203.00	204.00
Gwalior Rayon (10)	57.75	58.25	55.75	56.50
Khatau (100)	262.50	270.00	257.50	260.00
Kohinoor (100)	54.00	55.00	54.00	55.00
Morarjee (100)	245.00	255.00	245.00	247.50
National Rayon (100)	355.00	355.00	350.00	350.00
New Great Eastern (100)	100.50	—	—	100.50*
Phoenix (100)	47.00*	—	—	47.00*
Podar (10)	8.00	8.25	7.75	8.00
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	72.50	72.50	71.50	72.50
Standard (100)	527.00	533.00	511.00	520.00
Svadeshi (100)	167.00	171.00	167.00	171.00
Swan (100)	215.00	217.50	210.00	217.50
Ta a Mills (25)	26.00	28.00	26.00	27.00
Electric				
Ahmedabad (100)	99.50cd	101.00cd	91.50xd	92 50xd
Andhra Valley (100)	129.00	—	—	129 00*
B.Subarban (100)	120.50	122.50	122.50	122.50
Tata Hydro (100)	130.00	130.00	122.00	122.00
Tata Power (100)	129.00xd	127.00	119.00	120.00
Steel				
Mukand (10)	27.75	29.75	27.00	27.75
Tata Steel (100)	349.50	355.00	332.00	344.00
Engineering				
Larsen & Toubro (10)	60.00	64.00	60.00	63.00
Tata Eng. & Loco (100	618.00	623.00	592.00	606.00
S.L.M. Maneklal (100)	197.50	185.00	165.00	170.00
Voltas (100)	199.00	205.00	197.00	201.00
Walchandnagar (100)	210.00	210.00	208.00	210.00
Dyes & Chem				
Amar Dye-Chem (100)	142.50	147.50	143.75	147.50
Indian Dyestuff (100)	225.00	230.00	210.00	217.00
Polychem (50)	70.00	73.00	70.00	72.00
Tata Chemical (10)	62.00	64.00	58.00	59.00
Shipping				
Great Eastern (10)	50.00	52.50	48.75	50.25
Scindia (20)	26.15	27.00	25.00	25.75
Cement				
A.C.C. (100)	144.00	145.00	136.00	140.00
Shree Digvijay (100)	155.00	155.00	150.00	150.00
Sugar				
Maharashtra (50)	51.00	51.00	48.00	48.00
Phaltan (50)	43.00	—	—	43.00*
Miscellaneous				
Bombay Burmah (25)	44.00	44.25	43.75	44.25
Hindustan Motors (10)	26.75	26.50	25.50	26.00
Premier Automobiles (100)	241.00	248.00	236.00	245.50
Pre. Construction (50)	79.00	79.00	77.00	78.00
Sirpur Paper (10)	31.00	32.00	29.00	30.00
Tata Oil (25)	69.00	71.00	65.00	66.00
W. Coast Paper (100)	102.50	102.50	101.25	101.25
Wimco (10)	14.50	14.50	14.00	14.50
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	325.00	330.00	312.00	321.50
Century Enka (100)	680.00	680.00	655.00	655.00
Garware Nylons (10)	35.00	36.25	34.75	35.00
Gold Mohur (100)	92.00*	—	—	92.00*
Indian Rayon (10)	87.00cd	90.50cd	83.50xd	87.00xd
J. K. Cotton (10)	17.50	17.50	16.00	17.25
J. K. Synthetics (10)	50.50	51.00	49.00	49.50
Lakshmi Vishnu (100)	55.00	58.00	56.00	58.00
Mafatlal Fine (100)	235.00	235.00	228.75	231.25
Mafatlal Industries (125)	385.00	385.00	378.75	380.00
Modella Woollen (10)	9.75	10.00	9.50	10.00
Modipon (10)	67.00*	—	—	67.00*
Nizlon (10)	60.00cd	61.00cd	57.25xd	58.00xd

	Closing quotations 22-8-81	High	Low	Closing quotations 29-8-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	54.00	55.00	54.00	55.00
Reliance Textile (10)	92.25	96.50	90 50	96.25
S. I. Viscose (100)	252.50	257.50	232.00	245 00
Stretch Fibres (10)	9.00	9.00	8.25	8.50
Swadeshi Polytex (10)	15.25	15.50	15.00	15.25
Electric				
Amalgamated (10)	7.00	—	—	7.00*
Surat (100) ...	104.00cd	104.00cd	93.00xd	94.00xd
Cement				
Mysore Cement (10)	34.00	34.00	31.00	32.00
Saurashtra Cement (100)	110.00*	—	—	110.00*
Paper				
Andhra Paper (100)	235.00*	235.00	220.00	220.00
Bhadrachalam (10)	17.50*	—	—	17.50*
Jayant Paper (100)	165.00*	165.00	155.00	160.00
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	35.50	35.00	34.00	34 50
Ferro Alloys (100)	275.00	275.00	272.50	272 50
Hind Aluminium (10)	51.50	51.50	48.00	48.50
Khandelwal Ferro (100)	131.25	131.25	127.00	127.00
Mahindra Ugine (10)	54.50	54.50	52.00	54.00
Tata Yodogawa (100)	130.00*	130.00	125.00	125.00
Engineering				
Associated Bearings (100)	372.50	376.25	372.50	375.00
Bimetal Bearings (10) ...	41.00	—	—	41.00*
Blue Star (10)	35.50	35.50	32.75	32.75
Elecon Engineering (100)	435.00*	435.00	435.00	435.00
Gujarat Steel Tube (100)	650.00	652.50	625.00	625.00
Hindustan Brown (100)	306.25*	—	—	306.25*
Ingersoll-Rand (10) ...	102.00	105.00	99.00	101.00
Jyoti (100)	253.75	252.50	240.00	245.00
Kirloskar Cummins (100)	540.00	537.50	515.00	520.00
Kirloskar Oils (10) ...	27.00	28.25	26.75	28.25
Kirloskar Pneumatic (10)	53.00	53.00	49.00	50.00
Mahindra (10)	51.00	52.00	49.00	50.00
New Standard (100) ...	121.25	125.00	125.00	125.00
Sandvik Asia (100) ...	340.00*	—	—	340.00*
Vulcan-Laval (10) ...	33.50	34.00	32.50	33.50
Zenith Steel (10) ...	45.00	47.00	43.50	44.00
Cables & Elec.				
Asian Cables (100) ...	237.50	237.50	222.50	226.25
Bajaj Electricals (100) ...	200.00	200.00	195.00	195 00
Crompton Greaves (100)	365.00	—	—	365.00*
Otis Elevator (10) ...	59.50	—	—	54.00*
Siemens India (10) ...	53.50	53.00	51.00	52.00
Chemicals				
BASF (10)	58.00	58.00	56.00	56.00
Bayer (India) (100) ...	237.50	242.50	231.25	233.75
Chem & Fibres (10) ...	20.50	21.50	20.50	21.50
Colour-Chem (100) ...	197.50	200.00	187.50	187.50
German Remedies (10)	25.50	25.75	25.25	25.75
Gujarat State Fert. (100)	429.00	436.00	419.00	428.00
Hindustan Lever (10) ...	42.75	42.50	41.50	42.00
Indian Organic (100) ...	320.00	327.50	310.00	316.00
National Organic (100)	215.00	212.00	201.00	204.00
Pfizer (10)	25.50	25.75	25.00	25.00
Polyolefins Ind. (100) ...	300.00	300.00	287.50	290.00
Sandoz (10)	25.75	25.75	24.50	25.50
Synthetics (100) ...	100.00	102.00	98.00	102.00
Warner-Hindustan (10)	23.00	—	—	23.00*
Zuari Agro (10)... ...	26.50	26.50	26.00	26.00
Miscellaneous				
Bajaj Auto (100)	1,540.00	1,525.00	1,460.00	1,475.00
Bombay Oxygen (100)	115.00	115.00	112.50	112.50
Cadbury (10)	20.25	20.25	19.50	19.50
Camphor & Allied (100)	227.50	—	—	227.50*
Ceat Tyres (100) ...	200.00	200.00	195.00	197.50
Colgate-Palmolive (10)	135.00	140.00	135.00	138.00
Empire Industries (15)	30.50*	30.50	26.00	26.00
Fibre glass (10) ...	23.00	23.00	21.00	22.00
Gammon India (10) ...	21.00	21.25	20.50	21.25
Hindustan Ferodo (10)	42.50*	—	—	42.50*
Hoechst Dyes (10) ...	25.25	26 00	25.25	26.00
Indian Hotels (10) ...	79.00	84.00	74.00	76.00
Motor Industries (100)	461.75	467.50	440.00	460.00
Tata-Finlay (10) ...	12.50	12.50	12.25	12.25

Notes : Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.
(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns
(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

THE KARUR VYSYA BANK LTD

Registered Office : JAWAHAR BAZAAR, KARUR-639 001

ABRIDGED BALANCE SHEET AS AT 31st DECEMBER 1980

1979		CAPITAL & LIABILITIES		1980
Rs.				Rs.
24,00,390	1	Paid-up Capital		29,98,950
76,688	2	Calls in advance		...
61,18,844	3	Reserve fund and other Reserves		70,62,079
57,21,83,002	4	Deposits and other accounts		70,54,98,856
1,58,17,345	5	Borrowings from Banks, Agents, etc.		2,20,36,537
97,05,166	6	Bills Payable		1,29,65,774
3,46,14,410	7	Bills for collection (as per contra)		3,41,68,277
3,22,43,222	8	Other Liabilities		3,48,01,270
1,15,94,409	9	Acceptances, Endorsements and other obligations, (as per contra)		5,05,39,015
	10	Profit :	14,18,942	
		Less : Appropriations :		
		Statutory Reserve	6,40,000	
3,07,102		Other Reserves	3,29,200	4,49,742
68,50,60,578				87,05,20,500

1979		PROPERTY & ASSETS	1980
Rs.			Rs.
7,85,23,595	1	Cash in hand and with RBI and SBI	12,06,96,257
2,18,62,410	2	Balances with other banks	3,49,83,417
15,60,80,712	3	Investments at cost	17,59,23,923
35,64,55,691	4	Advances	41,90,01,447
3,46,14,410	5	Bills for collection (as per contra)	3,41,68,277
1,15,94,409	6	Constituents' Liabilities for Acceptances, Endorsements, etc (as per contra)	5,05,39,015
19,95,143	7	Premises	22,81,619
28,46,378	8	Furniture and Fixtures	35,91,600
2,10,87,830	9	Other Assets	2,93,34,945
68,50,60,578			87,05,20,500

Market Gossip

Chowgule Steamships: Fresh issue

CHOWGULE Steamships propose to make a fresh issue of capital totalling Rs 2.33 crores. This is being done in pursuance of the Central Government's requirement that the shareholding of Chowgules be diluted to 40 per cent. Originally it was as high as 99.26 per cent but was brought down to 53.98 per cent in 1977 by issuing 35 lakh equity shares of Rs 10 each. The new issue will comprise 23.35 lakh equity shares of Rs 10 each. Of these 10,85,000 equity shares are being reserved for preference share allotment to the shareholders (other than Chowgules and their associates) who will be on the register of members on November 4, 1981. The balance of 12.50 lakh equity shares is being issued at par to the public. There is a provision that if any of the 10.85 lakh shares reserved for the shareholders remain unsubscribed, they will be added to the 12.50 lakh equity shares offered to the public. The company has recently announced 15 per cent dividend for the year 1980-81 and the Rs 10 share is currently ruling at Rs 19/20. The company has also announced an expansion plan which will increase deadweight tonnage of the fleet from 2.70 lakh to 5.65 lakh. The ships, three of which are on order with the Cochin Shipyard and two of which will be ordered from foreign shipyards, are expected to be added to the company's tonnage in next three or four years. The company is confident that its increased tonnage will be gainfully employed.

Sugar for whom?

SUGAR appears to be losing its buoyant undertone prevailing for some months past and prices have come down in retail markets to Rs 5.20 to Rs 5.60 per kg from Rs 7 or so a few weeks ago. The much desired fall in prices, awaited eagerly by consumers as the festive season is approaching fast, has come about in the wake of a correct step, though rather belated, taken by the Government to announce higher sale quota for September. Prices had started falling immediately after the quota was announced, and sugar traders were naturally in panic. The Bombay Sugar Merchants Association, in order to protect interests of its members, tried to fix some sort of floor price for sugar, with the result prices began looking up again. However, not all its members appear to be keen on floor price. The sugar trade in general, and consumers in particular, have objected strongly to the idea of artificially pegging prices instead of leaving them to be determined by natural demand and supply forces.

In any case the local body of sugar merchants has lost its face. The question that is being asked repeatedly: why did not the association fix a ceiling price when sugar prices were spiralling? Its contention that sugar bought at earlier high prices cannot be sold at a loss is also not convincing. Then why does not the trade sell sugar bought by it at lower prices at the same price when market prices are going higher? All this only proves that the sugar trade wants to have its cake and eat it too. Happily however, sugar prices have begun coming down again in response to demand-supply forces and consumers only wish that the downtrend will persist till the time new season sugar starts flowing into the market. Meanwhile, there is some speculation as to the mode of selling imported sugar, the first lot of 12,000 tonnes of which has already arrived at Tuticorin and two more consignments totalling 21,000 tonnes are expected to land as this is written. It appears instead of supplying this sugar through public distribution channels, the Government is thinking of selling the same to the trade through auctions. If that comes about, the Government would have played into the hands of unscrupulous traders and its objective of supplying this essential commodity to consumers at a reasonable price will remain only on paper.

A gold price formula?

GOLD experts always differ in their assessment of the possible movements of the yellow metal's prices. They have to take various factors into account and naturally what weightage to attach to each factor is a subjective judgement. Now International Gold Corporation, the marketing wing of the South African Chamber of Mines, has come up with a formula which it believes is much more reliable. The complex formula for gold price incorporates the political tension index with three other variables: inflation in major world currencies, interest rates and the exchange rates of the US dollar with inflation being given the greatest weight. International Gold claims that this pricing model is 87 per cent accurate. But the market people want to know more details before they pronounce a judgement. The reaction is generally sceptical for the traders say gold is an emotional market that is not subject to any formula.

State loans

ALL the 20 state government loans for a total of Rs 457.25 crores have been fully subscribed. Banks, Life Insurance Corporation and general insurance companies reportedly extended their full support to the loans, subscription lists of which were closed on the opening day itself. The cash-cum-conversion loans carry an interest of 7 per cent and will be redeemable at par after 12 years. Maturing loans of 15 state governments totalled 170.57 crores and were eligible for conversion.

UP headed the list totalling a loan of Rs 84 crores. Other state loans were: Andhra Pradesh (52 crores), Rajasthan (38 crores), Maharashtra (35.20 crores), Tamil Nadu (34.05 crores), Gujarat (29 crores), Bihar (25.5 crores), Kerala (24 crores), Orissa (23.75 crores), Karnataka (22.75 crores), West Bengal (19.75 crores), Madhya Pradesh (19.25 crores), Haryana (14 crores), Punjab (12.25 crores), Assam (11.05 crores), Nagaland (3.75 crores), Tripura, Manipur and Jammu & Kashmir (2.75 crores each) and Himachal Pradesh (1.75 crores).

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*August 29, 1981*	*A week ago*
Groundnut	*(Rajkot)*	538	546
Rapeseed	*(Kanpur)*	508	525
Sesamum	*(Delhi)*	600	655
Castorseed	*(Kanpur)*	291	293
Linseed	*(Kanpur)*	525	535
Sugar	*(Bombay) (a)*	568	550
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	240	240
Aluminium	*(Bombay) (d)*	1,480	1,510
Copper	*(Bombay) (e)*	3,600	3,670
Lead	*(Calcutta) (f)*	1,250	1,250
Zine	*(Calcutta) (g)*	1,720	1,710
Gold	*(Bombay) (h)*	1,780	1,745
Silver	*(Bombay) (i)*	2,715	2,765
Caustic soda	*(Bombay) (j)*	635	614
Soda ash	*(Bombay) (k)*	242	242

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996, (j) Flakes and (k) Tata.

COMMODITIES

Cotton prices steady

Bombay, August 31

Quietly steady conditions prevailed in the spot cotton market during the past week. Pending further light on the prospects of early arrivals of Pakistan cotton, there was limited support from the traders towards fresh purchases. In the event, a few varieties, in fact, showed a loss of Rs 50 per candy.

Indications are that a delegation comprising representatives of the Indian Cotton Mills' Federation, the Cotton Corporation of India and the Union Commerce Ministry might take a trip to Karachi. The purpose of the visit, barring renewing old contacts, is not very clear.

Meanwhile, reports from New Delhi indicate that the Commerce Minister had been rather annoyed that the entire Pakistan deal had been turned virtually into a farce. Why was so much fuss made about the acute shortage of short and medium staple cotton, presenting a picture of a critical statistical position, needing as much as ten lakh bales for making effective correction and why there has been such a lukewarm reception when one lakh bales had been negotiated for import? The Ministry is apparently in no mood to listen to the practical difficulties presented by the industry. The cotton import from Pakistan had been successfully negotiated after persuading the agricultural lobby, which had all along been very keen about exports than about imports.

Textile industry circles, however, are caught in a piquant situation. The mills cannot rouse the wrath of the Government by continuing to be indifferent about booking their requirements for Karachi cotton for fear of some punitive action or the other. The Indian Cotton Mills' Federation has alerted the concerned parties to expedite their booking of Pakistan cotton.

The mills have not been able to extend enthusiastic support for Karachi cotton for a variety of reasons. The CCI, which plays the role of the honest broker, has been insisting on getting its pound of flesh, that is 1.5 per cent commission or brokerage for just doing the referee's job as it were. At a time when equivalent indigenous cotton prices are seeking lower and lower levels, the industry is of the view that the CCI could extend some help by accepting a quarter per cent commission, which could mean a price differential of Rs 50 per candy.

Meanwhile, the Cotton Advisory Board, which met in Bombay, towards the end of the past week, confirmed that the carry-over would be reduced to a new low of 8.72 lakh bales at the end of the current season, hardly sufficient to meet a little over one month's consumption, a situation that had been apprehended by the textile industry while projecting the need for ten lakh bales of cotton imports some time in April this year! And the Textile Commissioner finds nothing panicky about it!

The following has been the trend of prices of some of the leading varieties :

(Rs. per candy)

	August 28	August 21
Digvijay	5,000-5,100	5,000-5,100
Kalyan	4,700-4,800	4,700-4,850
Saurashtra CO2	4,850-5,050	4,900-5,100
Shankar 4	5,800-6,150	5,800-6,200
Maharashtra H 4	5,450-5,600	5,450-5,600
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,450	5,300-5,450
MP Y1	4,900-5,050	4,950-5,050
MP 1007	5,150-5,250	5,200-5,250
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100

Upward trend in yarn

Bombay, August 31

An upward trend was noticed in the local yarn market during the past week. The prices of 150D NRC, 120D NRC, 150D CR and 120D CR increased by Rs 0.13, Rs 0.27, Rs 0.68 and Rs 0.42 to Rs 51.76, Rs 54.10, Rs 51.76 and Rs 54.10 respectively. The prices of 100D SIV and 150D Acetate, however, remained unchanged at Rs 61.12 and Rs 49.01 respectively.

Restricted activity in jute goods

Calcutta, August 24

With fresh interest restricted, activity in jute goods in the Calcutta gunny market during the past week was at a low level. Prices declined in early trading but recovered partially in the latter part of the week in the wake of speculative buying credited to dealers. It was pointed out by trade sources that the recovery was aided by rumours that the Indian Jute Mills Association was proposing to the Government shortly a block closure of mills to meet the current situation in the industry created by large accumulated stocks because of recession in demand.

The stalemate in trading was ascribed to slow buying on account of both domestic and overseas buyers. With the annual festival close ahead it was felt by the trade that the current sluggishness in demand might continue for some time more.

The acreage and yield of raw jute in West Bengal this year are lower than that of last year, according to a snap calculation. The acreage is lower by about 80,000 hectares and yield by about 20 per cent. This, according to reports available here, is due to farmers diverting their land to other crops and partly due to the State Government's stand that jute cultivation would be reduced if the growers did not get a remunerative price for their produce, beside late announcement of the minimum price for jute.

The Jute Corporation of India will shortly announce the minimum prices for the different grades of raw jute payable to the growers of south Bengal, according to Mr A. K. Moitra, chairman-cum-managing director of JCI. He said JCI would buy a total of 8.25 lakh bales from south Bengal. He said that efforts were being made to encourage the farmers to cultivate better quality of jute.

Meanwhile reports from upcountry reaching here said that the prices of raw jute in north Bengal have slumped in spite of extensive support operations by the Jute Corporation this year. The reason is the absence of jute mills from the market. Growers in the early grown areas like north Bengal, Assam and Bihar are being forced to dispose of their jute at Rs 12 per quintal below the minimum price fixed by the Government.

Oilseeds : All-round fall

Bombay, August 31

Nervous selling in groundnut oil following raids by income-tax authorities on the premises of a number of oil traders in Bombay, Gujarat, Madhya Pradesh and Andhra Pradesh affected the entire oilseed market during the past week.

Groundnut oil, which lost Rs 5.72 in the previous week, declined further by Rs 9.36 to Rs

PALM HOTELS (INDIA) LTD.

Registered Office :
HOTEL LA-PAZ
Swatantrya Path
Vasco-da-Gama 403 802
GOA.

CORRIGENDUM to Public Notice under Section 22 Sub-Section (2) of Monopolies and Restrictive Trade Practices Act. 1969 read with Rule 4A of MRTP Rules 1971- published in 'Commerce' issue of 14-2-1981.

In the earlier Notice dated 14-2-1981 the face value of shares was incorrectly indicated as Rs. 100/-. The correct particulars of Item (iii) of the Notice should read as follows :

Authorised capital : Rs. 1 crore
Paid up capital : Equity Rs. 80 lakhs

Share capital of the Company is divided into 10 lakh equity shares of Rs. 10/- each. Initially the Company proposes to issue 8 lakh equity shares of Rs. 10/- each.

For and on Behalf of Palm Hotels (India) Ltd.

Sd/-
S. K. MUKERJEE
Director

Dated this 21st day of August, 1981.

149.24 per 10 kg—a marked fall of Rs 15.08 in just two weeks. As a result of nervous selling in groundnut oil, groundnut also retreated sharply. Karad bold, Saurashtra bold and Saurashtra quality dropped by Rs 22 each to Rs 618, Rs 623 and Rs 628 per 100 kg.

Due to marked weakness in groundnut oil and lack of fresh buying , imported oils also lost significant ground. Palmoleine yielded Rs. 4.16 at Rs 143.52, soyabean Rs 10.44 at Rs 132.08 and RBD Rs 9.46 at Rs 120.54 per 10 kg.

Selling pressure also mounted on castor, linseed and their oils. Madras small and Kanpur fell back by Rs 8 each at Rs 320 and Rs 312 per 100 kg. Castor commercial oil and BSS oil slipped back by Rs 2.50 each to Rs 68.25 and Rs 73.25 per 10 kg respectively.

Linseed bold reacted by Rs 12 to Rs 530 per 100 kg and its oil by Rs 4.12 to Rs 68.25 per 10 kg.

An easy trend prevailed in cakes also but cottonseed was an exception with a gain of Rs 125 per tonne. Castor, however, again remained steady.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :

	29-8-1981	22-8-1981
G. nut Karad bold	618.00	640.00
G. nut oil	149.24	158.60
Cast. Md Small	320.00	328.00
Cast. oil com.	68.25	70.75
Cast. oil BSS	73.25	75.75
Linseed bold	530.00	542.00
Linseed oil	129.00	133.12

Grains divergent

Bombay, August 31

A divergent trend featured trading in grains in the local market during the week. Wheat and pulses displayed weakness, while rice (basmati) and jowar showed firmness.

In cereals, wheat declined due to good inflow of Punjab varieties. The superior variety eased by Rs 10 to Rs 280-300 per quintal. Local stockists were keen sellers. The undertone was subdued. Buyers were reserved. Advices from producing centres were discouraging. The Saurashtra variety was offered rupees five lower at Rs 210-230 per quintal.

Rice (basmati) was in good demand at Rs 450-700 per quintal (showing an increase of Rs 50 per quintal), on account of limited inflow because of the fag-end of the season. Surti Kolam ruled unchanged at Rs 340-400 per quintal. Demand was slack. Sellers were active. The inflow was good from the South. Arrivals averaged 1,500 bags per day.

In coarse grains, jowar was in short supply. Sellers were quoting rupees five higher at Rs 200-225 per quintal. Bajra was traded at Rs 185-260 per quintal and maize at Rs 185-190 per quintal showing no change over the week.

Among pulses, gram receded by Rs 21 to Rs 390-407 per quintal. Local demand was slack. Millers refrained from lifting gram for crushing. The inflow of gram dal was about 500 bags per day.

Sugar firm

Bombay, August 31

Sugar prices displayed firmness in the local market on renewed buying support. The price of sugar C-30 increased by Rs 25 to Rs 564-571 per quintal. Local dealers and bulk consumers were active. Sugar stocks at the weekend declined sharply to 906 bags as against 3,967 bags in the preceding week. The price of C-30 grade was lower by Rs 282 per quintal as compared with the corresponding price a year ago.

The State co-operative factories improved their quotations from the week's low price of Rs 485-490 per quintal to Rs 520-525 per quintal in the face of encouraging support from Gujarat buyers.

Gold spurts, silver plummets

Bombay, August 31

While gold prices spurted to reach a new high, silver prices plummeted in the Bombay bullion market during the past week.

NOTICE

It is hereby notified for the information of the public that CIBA-GEIGY of India Limited, 14, J. Tata Road, Bombay-400 020 proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under sub-section (1) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969 for substantial expansion of its activities. Brief particulars of the proposal are as under :

(i) Name(s) person(s)/body corporate owning the undertaking : CIBA-GEIGY of India Limited

(ii) Capital structure of the applicant undertaking : The authorised and paid-up capital of the Company as on 31-12-1980 is Rs 138,937,500/- divided into 1,389,375 equity shares of Rs. 100/- each.

(iii) Details of the proposed substantial expansion :
  (a) Names of new goods to be produced, supplied, controlled or distributed or of new services to be rendered : Manufacture of Isoproturon and Isoproturon based formulations
  (b) In the case of substantial expansion of existing activities :
    (i) Names of goods : The Company is currently manufacturing pesticides at its Goa Plant where it is now proposed to manufacture Isoproturon and Isoproturon based formulations.
    (ii) Capacity before expansion : Nil
    (iii) Expansion proposed : Isoproturon technical —500 tonnes per annum
    Formulations based on Isoproturon technical —Equivalent to 500 tonnes of technical material
    (iv) Location of the project for substantial expansion : At the Company's existing plant site at Santa Monica, Corlim, Ilhas, Goa.
    (v) Brief outline of the cost of the project, the scheme and sources of finance : The estimated capital investment of Rs. 26.5 mio. will be financed primarily from the retained earnings of the Company.

2. Any person interested in the matter, may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Sd/-
M. R. LAL
Secretary
CIBA-GEIGY OF INDIA LIMITED

Bombay, 31 st August, 1981

THE STANDARD MILLS COMPANY LIMITED

NOTICE

1. It is hereby notified for the information of the public that THE STANDARD MILLS COMPANY LIMITED, proposes to give to the Central Government in the Department of Company Affairs, New Delhi, a notice under Sub-Section (1) of Section 21 of the Monopolies and Restrictive Trade Practices Act, 1969, for substantial expansion of its activities. Brief particulars of the proposal are as under :

i. Name of the body corporate owning the undertaking : THE STANDARD MILLS COMPANY LIMITED. Mafatlal Centre, Nariman Point, Bombay-400 021.

ii. Capital structure of the applicant undertaking :

			Rs.
(A) Authorised Capital	:(i)	6,46,824 Equity Shares of Rs. 100/- each ..	6,46,82,400
	(ii)	6,000—5.72% Cumulative Redeemable First Preference Shares of Rs. 100/- each ..	6,00,000
	(iii)	6,000—5.72% Cumulative Redeemable Second Preference Shares of Rs. 100/- each ..	6,00,000
	(iv	3,41,176 Unclassified Shares of Rs.100/- each	3,41,17,600
		Total ..	10,00,00,000
(B) Issued and Subscribed	: (i)	6,46,824 Equity Shares of Rs. 100/- each ..	6,46,82,400
	(ii)	6,000—5.72% Cumulative Redeemable First Preference Shares of Rs. 100/- each (subject to deduction of Shareholders' tax only) ..	6,00,000
	(iii)	6,000—5.72% Cumulative Redeemable Second Preference Shares of Rs. 100/- each (subject to deduction of Shareholders' tax only),	6,00,000
		Total ..	6,58,82,400

(iii) Details of the proposed substantial expansion :

(A) Name of the new products to be produced, supplied, controlied or distributed—or of new services to be rendered. — Stable Bleaching Powder

10,000 M T. per annum.

(B) In the case of substantial expansion of the existing activitives :

(a) Name of Goods :)
(b) Capacity before expansion:) Not Applicable
(c) Expansion proposed :)

(d) Proposed location of the project for substantial expansion : Thane-Belapur Road, Maharashtra. The proposed plant will be housed within the existing factory premises at Thane.

(e) Brief outline of the cost of the project, the scheme and the sources of finance : The estimated cost of the project :

	(Rs. in lacs)
(i) Land	Nil
(ii) Building	20
(iii) Machinery	120
(iv) Others	Nil
	140

Requirement of finance will be met by the Company from its internal resources.

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Registered Office:
Mafatlal Centre, Nariman Point,
Bombay-400 021.

For and on behalf of
The Standard Mills Co. Ltd.

Dated : 11th August, 1981.

(B. D. DATAR)
Secretary

NOTICE

It is hereby notified for the information of the public that Sree Akkamamba Textiles Ltd., Venkatarayapuram, Tanuku-534215, proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under Sub-Section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approvals for the establishment of a new undertaking for the manufacturing of Writing and Printing paper with 10,000 Tonnes capacity with estimated annual production of Rs 630 lakhs. Other particulars of the proposed new undertaking are as follows :—

(1) Name of the proposed undertaking : SREE AKKAMAMBA TEXTILES LTD., (Paper Unit)

(2) Name of person or authority proposing to establish the new undertaking where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking : SREE AKKAMAMBA TEXTILES LTD., TANUKU. Managed by Board of Directors.

(3) Capacity structure of the applicant and of the proposed undertaking :

Authorised capital ..	Rs. 1,00,00,000
Issued capital ..	Rs. 51,70,440
Subscribed and paid up capital	Rs. 43,40,880

(4) Proposed location of the new undertaking : Tanuku, West Godavari District, Andhra Pradesh.

(5) Brief outline of the cost of the project, the scheme and source of finance :

Cost of proposed project :

Land	Rs. 15.00 Lakhs
Buildings	Rs. 79.06 ,,
Plant and Machinery	Rs. 355.60 ,,
Pre-operative Exp. ..	Rs. 72.00 ,,
Consultation charges	Rs. 36.00 ,,
Contingents etc. ..	Rs. 72.34 ,,
	Rs. 630.00 ,,

Source of Finance :

Fresh issue of capital	Rs. 40.00 Lakhs
Debenture issue ..	Rs. 50.00 ,,
Internal generation of funds	Rs. 135.00 ,,
Term loans from Banks and financial institutions ..	Rs. 405.00 ,,
	Rs. 630.00 ,,

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this notice intimating his views on the proposal and indicating the nature of his interest therein.

For SREE AKKAMAMBA TEXTILES LTD.,

(M. VENKATARAYUDU)
Director

Dated : 24th August, 1981.

Standard mint gold o at Rs 1,755 per 10 gms and shot up to Rs 1,780 per 10 gms at the close of the week. Ready silver (.999 fineness) commenced at Rs 2,770 per kg and plummeted to Rs 2,715 per kg at the close of the week.

Money comfortable

Bombay, August 31

Conditions were comfortable in the Bombay short-term money market during the past week.

Interest rates opened at 8 per cent and after fluctuating between 8 per cent and 6 per cent up to August 27 (Thursday) declined sharply to 3 per cent on Friday only to firm up to 9.5 per cent the next day. The market closed firm at 9 per cent.

Bank credit and aggregate deposits expand

Bombay, August 31

Bank credit of scheduled commercial banks expanded by Rs 47.14 crores to Rs 26,822.19 crores during the week ended August 21, 1981. Aggregate deposits increased by Rs 75.46 crores to Rs 40,783.84 crores. The balances of banks with the Reserve Bank of India (RBI) declined by Rs 609.74 crores to Rs 5,132.23 crores and their borrowings from the RBI dropped by Rs 8.03 crores to Rs 552.56 crores.

otices

SEVEN SEAS TRANSPORTATION LIMITED

Registered Office:

15A Chander Mukhi,
Nariman Point,
BOMBAY 400 021

General Notice under the M.R.T.P. Act, 1969

Pursuant to Rule 4-A of the Monopolies and Restrictive Trade Practices Rules, 1970, it is hereby notified to the members of the public that in accordance with Section 21 (3) (d) of the Monopolies and Restrictive Trade Practices Act 1969, the above named Company proposes to apply to the Central Government for modification of the order No. L/43/74-M (III) dated 21st July 1975, so as to acquire ships of a total DWT of about 1,25,000 costing not more than Rs. 65 crores. Any person interested in the matter may, if he so desires, intimate to Central Government in the Department of Company Affairs, New Delhi, within fourteen days from the date of publication of this notice, his views with regard to the above proposal and also the nature of his interest therein.

for SEVEN SEAS
TRANSPORTATION
LIMITED
(K. B. DABKE)
Secretary

Bombay, the 31st August, 1981.

THE TITAGHUR PAPER MILLS COMPANY LIMITED

At the meeting dated the 22nd August, 1981, the Board of Directors has recommended payment of the following dividends for the year ended 31st March, 1981, subject to deduction of tax at source and to the approval of the shareholders at the Annual General Meeting to be held at the main hall of the Bengal Chamber of Commerce and Industry, Netaji Subhas Road, Calcutta-700 001 on Wednesday, the 30th September, 1981 at 11.00 a.m. for which notice and the agenda are being mailed to the Members.

A) On 1st cumulative preference shares at the rate of 10.4% p.a.

B) On 2nd cumulative preference shares at the rate of 5.85% p.a.

C) On preferred ordinary shares at the rate of 13% p.a.

*D) On 'A' and 'B' ordinary shares at the rate of 8% p.a.

* Subject to the approval of the Lending Institutions.

Pursuant to Section 154 of the Companies Act, 1956, the Registers of Members shall remain closed from 15th to 30th September 1981, both days inclusive.

Eligible members are requested to submit to the company, the Form No. 14B, in duplicate, on or before 30th September, 1981 in order to claim exemption under Section 194 of the Income Tax Act, 1961.

By Order of the Board
K. GHOSH
Director and Secretary

Registered Office:
95, Park Street,
Calcutta-700 016.
Dated, the 22nd August 1981.

Regulation of credit to industry

Concluded from page 452

1979-80, the following observation occurs: "In June 1979, it was indicated to banks that the credit expansion in the fiscal year 1979-80 should be 'significantly less' than in the last year. As a means of achieving this end, banks were asked to exercise great care and discretion in allowing enhancements to existing large credit limits (above Rs 50 lakhs) and to discourage the extensive reliance of large borrowers on bank funds for working capital needs."

It is time to infer that banks cannot be expected to be flush with funds merely because of the pursuit of directions not to extend credit to existing borrowers beyond previous limits whereas the main purpose of banks would be to be able to see the full justification of the demand for credit. There can be no useful method by which, for instance, any authority can be created to so draw away from banks the surplus funds for being utilised by several units in the priority sectors. The basic principle behind the pursuit of the philosophy of diverting bank credit from large scale and medium scale industry to small scale units and other kinds of enterprises needs to be studied in depth by the government itself to give some scope to finding out methods of actually pursuing the philosophy in terms of practical benefit.

One is somewhat intoxicated by the cocktail between thoughts on theory behind policy formulation and the ramblings of ideas through the incompetence in practice of the theory itself. But some refrain from atleast overhanging is provided by a few thoughts included in the presidential address of Mr I. G. Patel (now the Governor of the Reserve Bank of India) at the 49th annual conference of The Indian Economic Association at Calcutta in December 1966 (when he was attached to the Ministry of Finance): "A certain amount of controversy is inherent in a society in a state of rapid but inchoate transition where agreement on the constraints on the economic system and its ultimate destination is difficult to come by. It is also arguable that the realm of economic policy and the realm of economic theory overlap only at the rather uninteresting periphery which cannot hold the attention of more agile minds; our indifference or scepticism is perhaps fortified by lack of will to wield the means on the part of society at large. But there is no other country where it is more appropriate for economists to recall that 'it is not wonder, but rather the social enthusiasm which revolts from the sordidness of mean streets and the joylessness of withered lives, that is the beginning of economic science.'"

Could we conclude that the Chore group came because of this kind of social enthusiasm; perhaps, the enthusiasm would be seen to be more prolific of practical ideas if the banks themselves were asked to go into deeper understanding of the credit structure they had to be maintaining. Why not let the Indian Banks Association really become a kind of chamber of commerce like so many other specialised chambers of commerce. The pursuit of social enthusiasm would be much more beneficial for society itself then.

Beyond headlines

Regulation of credit to industry

By VERITAS

LINK between money supply and the growth of the economy cannot easily be assessed although this seems an essential requirement before any policy formulations can be made regarding the regulation of credit to industry and trade. It is significant to note that the much talked about Chore Committee was set up on April 4, 1979 (when the Prime Minister was Mr Morarji Desai and the Finance Minister was Mr Charan Singh) and was expected to submit the report by May 15, 1979, that is, within a period of five weeks. The report was submitted in August 31, 1979, that is within, say, five months instead of five weeks. By that time the Central Government had changed with Mr Charan Singh as the Prime Minister, but a Prime Minister with a great difference in the sense that he was asked by the President not to bring any great changes in policy as there was bound to be a fresh election to Parliament very soon. Even so, it may be interesting to note that the Chore Committee report was given some serious attention by the new government. It was in December 1980, that is, almost a year after the new government was formed, the Reserve Bank of India announced its decision to accept a good part of the recommendations of the Chore Committee, mostly relating to the principle of forcing banks to know more and more about the actual functioning of the credit seekers and to call upon the credit seekers to put into both fixed capital and working capital a substantial part of the profit which would otherwise go into other business ventures or expanded consumption expenditure.

It is not necessary here to point out that the authority concerned at the time of the appointment of the Chore Committee was particularly interested in bringing about great changes in the manner of regulating credit but it is certainly interesting to note the following observation of the Committee in respect of the main term of reference it had to deal with namely, to suggest "alternative types of credit facilities, which would ensure greater credit discipline and also enable banks to relate credit limits to increases in output or other productive activities".

"A study of bank borrowings in relation to the increase in the index of industrial output in conjunction with the price index may not, however, reflect the precise position, as the weightage given in the price index would probably distort the picture to some extent. The Group understands that some attempts have been made in the past to study the increase in bank borrowings in relation to industrial output in conjunction with the price level index. Because of the limitations in such a system of comparison and as the data were comparatively old, the Group has not been able to make use of such studies. As this issue is obviously of great concern to the monetary authorities and as the question has often been raised in the context of the increases in bank borrowings, the Group recommends that the Reserve Bank may undertake a detailed scientific study of this aspect." The chairman of the group, Mr Chore and two of the five members of the group are in the Reserve Bank of India and noting that the time taken by the group was much longer than originally suggested as the time required for the study, it is rather difficult to understand why there has been little such attempt by the group. The main study required has not been done. Whether such a study is now being done in the Reserve Bank is not known.

However, the Chore group did have to make some recommendations and the recommendations necessarily have to be based on some findings. One important finding actually relates to the main term of reference noted above. This is as follows : "Though the gap between the sanctioned limit and utilisation is substantial and the possibility of its misuse during periods of credit restraint cannot be ruled out, there was no empirical evidence to show that the gap was so misutilised." The observation and the conclusion are both illustrative of an almost totally academic approach to an enquiry into available data whereas the appointing authority was at least profoundly influenced by the lack of opportunity to take up such a study of the available data that would promote the formulation of a policy of credit control and regulation to help elimination of credit seekers, with legitimate purposes to pursue, out of the practical compulsion to seek credit in the unorganised sector.

It is interesting in this context to recall a commentary from the Reserve Bank of India's annual report for 1978-79. Referring to the extraordinary share of currency in money supply in 1978-79, the report said that the reasons for this increase were not clear but still said as follows: "Factors such as the scale of procurement operations and the delays and disruptions in banking services in the past year may have been of some influence. Nonetheless it is too early to say whether the high currency component of the money supply increase in the year under review is a temporary aberration or is indicative of a basic shift in the asset preference of the public." It is possible to argue that the Chore group would not have been interested in making the study implied in this observation. Even so, it cannot be overlooked that as modernisation of the economy proceeds there can be substantial increase in the share of other items than currency in the money supply.

The preference for currency has both political and other non-economic implications, a subject which is not easy to divulge. However, in the annual report of the Reserve Bank for 1978-79 the following observations were also made: "This phenomenon of currency expansion has a short-run as well as a long-run implication. In the short run, the growth in currency with the public implies a smaller increase in bank deposits on which secondary expansion is based. However, any sharp reversal of this feature with a pronounced shift from currency to deposits would, by greatly enhancing the liquidity of banks, further aggravate the problem of controlling credit expansion. But in the longer run, the persistence or continuance of the feature of currency preference by the public could, by restricting the area of operation of monetary policy, reduce the effectiveness of the policy measures. This would mean, among other things, an increase in the non-bank funds available for maintaining stocks which, in turn, would necessitate the formulation of policies for directly controlling the hoarding of sensitive commodities."

While it is difficult not to agree with these observations, it is at least necessary to say that there is need for greater and continuous study of the sources of non-bank credit. Indeed, it is not necessary to be a cynic to say that the Reserve Bank was itself directing credit seekers to go to sources other than banks; for, for instance, in the annual report for

COMMERCE

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EDITOR : VADILAL DAGLI
ASSOCIATE EDITORS : D. B. MAHATME
SUBHASH CHANDRA SARKER

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PEOPLE

Viswanathan

Mr Balwant Rai has been elected chairman of the consultative committee of City Chambers of Commerce, Madras, for the year 1981-82. Mr Rai is also the president of Hindustan Chamber of Commerce.

Mr P. K. Viswanathan has taken over as director (marketing) of Bharat Petroleum Corporation Ltd, a Government of India undertaking. He will be on the board of directors of the corporation.

Mr P. N. Vencatesan, who has been the managing director of The Premier Automobiles Ltd since March 1977, has also been appointed vice-chairman of the company from August 5, 1981. Mr Vencatesan, who is a qualified chartered accountant, was with Esso for 12 years before he joined PAL in July 1964 as the controller of accounts. Later he came to be entrusted with many more responsible positions in the company. In the last three years he has made determined efforts to pull PAL out of all its troubles.

Vencatesan

Srinivasan

Mr N. Srinivasan has taken over as chairman and chief executive officer of the Dhanalakshmi Bank Ltd, Trichur. He has had 30 years' experience in the banking industry and was associated with Grindlays Bank Ltd before coming over to Dhanalakshmi. Mr Srinivasan holds a master's degree in economics from the Madras University and is also a certified associate of the Indian Institute of Bankers. He is also the author of a book "Bankers' Guide to Bills".

Mr Bathini Nagabhushanam has taken charge as general manager of the Andhra Pradesh State Film Development Corporation Ltd, a State Government undertaking. Mr Nagabhushanam, who was till recently the liaison officer at the Ramangundam division of the Fertiliser Corporation of India, did his post-graduation in public administration from Osmania University, and takes keen interest in cultural associations of Hyderabad-Secunderabad.

Nagabhushanam

Kishore

Mr A. V. Kishore, who is the new executive director of Andhra Pradesh Electronic Development Corporation Ltd, a State Government undertaking, is an electrical engineer by profession and is also a member of the Indian Institute of Plant Engineers. Mr Kishore, who earlier worked with the Bihar State Electricity Board, Bhilai and Bokaro steel plants, came to Andhra Pradesh Industrial Development Corporation Ltd in March 1973 where he was till recently general manager (project promotion).

THE WEEK

Oil and Natural Gas Commission has struck oil in a new structure 35 km east of the Bombay High oilfield. The flow from this well is about 1,030 barrels a day, Mr P. C. Sethi, Union Minister for Petroleum, informed the Lok Sabha. Also oil has been discovered in small quantities in new wells in Assam and Gujarat. ★

Crude oil imports in 1982 are expected to decline to 14 million tonnes from the planned 16 million tonnes in the current year. The reduction would mean a saving of Rs 800 crores in foreign exchange. ★

The Government has turned down the plea of the private sector textile mills for permission to produce controlled cloth. The permission if granted will hit the government-owned National Textile Corporation mills. ★

Engineering Projects India Ltd has emerged as the top exporter of engineering products fetching Rs 122 crores in 1980-81, according to data prepared by Association of Indian Engineering Industry. ★

The Government has canalised import of pig iron in any grade through Steel Authority of India Ltd with immediate effect. Hitherto these imports were under open general licensing. ★

The Union Government has decided not to grant assistance from the Shipping Development Fund Committee to such companies as are planning to diversify into shipping business, according to Mr Veerendra Patil, Union Minister for Shipping and Transport. ★

Coal production target for 1981-82 has been raised by three million tonnes to 124 million tonnes. If achieved, this would mean a nine per cent increase over last year's production of 114 million tonnes. ★

A national handloom expo will be held at Hyderabad from November 1, according to Dr N. P. Seshadri, joint handloom commissioner. ★

The Government has approved a Rs 2.18-crore proposal for a feasibility study in the Gulf of Kutch to produce energy from tidal waves, Minister of State for Energy, Mr Vikram Mahajan, told the Rajya Sabha. ★

The first shipment of Pakistan cotton consisting of 30,000 bales is expected to land at Bhavnagar next week. ★

The exchange rate between the Indian rupee and the Russian rouble has been revised from September 10, 1981, to Rs 9.7247 per rouble from Rs 9.4137 earlier. ★

Wholesale price index

At 289.2, the latest available official wholesale price index for the week ended August 22, 1981 showed a rise of 0.5 per cent over the preceding week and 11.1 per cent over the year.

Money stringent

Conditions were tight in the Bombay short-term money market as on Monday (September 7, 1981). Both notified and commercial funds were renewed at ten per cent. Fresh money was also transacted at ten per cent.

COMMERCE

Idle fertiliser capacity

THE future of the country depends on the amount of investment that is made on the development of different sectors of the economy. However, investment by itself does not assure the desired results, as the experience with the fertiliser industry so eloquently shows. There has been tremendous growth in the industry: fertiliser production in 1979-80 was 2.2 million tonnes of nitrogen against just 10,000 tonnes in 1950-51. During the same period the production of P_2O_5 rose from 8,000 tonnes to 7,50,000 tonnes. India is now the fourth largest fertiliser producer in the world. The fertiliser industry involved a capital outlay of Rs 2.496 crores during 1979-80 of which the major share (Rs 1,938.3 crores) was accounted for by the public sector and the co-operatives and Rs 557.3 crores by the private sector. At the end of 1980 the fertiliser projects under implementation involved a financial outlay of Rs 2.181 crores, of which again the public sector accounted for Rs 1,803 crores and the private sector Rs 378 crores.

Despite the impressive growth in fertiliser production the consumption has always exceeded indigenous production necessitating large-scale imports, affecting adversely the balance of trade. During 1980-81 the deficit of N was 1,546 thousand tonnes and that of P_2O_5 was 391 thousand tonnes. In terms of percentage to total consumption the deficit amounted to 42 per cent in the case of nitrogen and nearly 32 per cent in the case of P_2O_5 As there is no known source of potash the entire requirement of K_2O had to be made through imports.

Since without an adequate dose of fertiliser agricultural production cannot improve, the imports of fertilisers could have been considered worthwhile if they had become inevitable after exhausting all avenues of augmenting fertiliser supplies from indigenous sources. Unfortunately this cannot be stated to be the case. Year after year the capacity of the fertiliser industry has remained very much underutilised. During 1980-81 the capacity of the fertiliser industry was utilised only to the extent of 53 per cent and 1.5 million tonnes N were imported. If the capacity of the fertiliser industry had not been so grossly underutilised perhaps the bulk of this importer quantity could have been produced within the country itself.

In this context the urgent need to secure a better capacity utilisation of the fertiliser industry can hardly be overemphasised. A review of fertiliser consumption and production in 1980-81 made by the Fertiliser Association of India identifies as the major constraints in achieving a better capacity utilisation primarily poor performance of the infrastructure sectors, more particularly power, coal, transport and non-availability of essential raw materials. The two coal-based fertiliser projects at Ramagundam in Andhra Pradesh and Talcher in Orissa, which went into commercial production during the year, remained severely underutilised because of constraints in power supply. Problems of industrial relations affected the production seriously in a few plants. Nevertheless six nitrogenous complexes and seven SSP plants achieved over 80 per cent capacity utilisation.

Apparently while setting up capacity, enough of thought had not been given in some cases to the requirement of its utilisation. This is particularly true in the case of the public sector units. For example, the Talcher unit of the Fertiliser Corporation of India is suffering from teething troubles which cannot be got over without an extra gasification unit and boiler to stabilise operations at an acceptable level of capacity utilisation. But to add this extra unit and boiler would take quite some time. The performance of the other coal-based unit at Ramagundam has again been far from satisfactory and requires for improvement an extra gasifier and boiler and the installation of an additional NO removal unit.

The capacity utilisation is particularly low in the public sector enterprises which again account for the bulk of the investment in fertiliser industry. The consequence has been the recurring losses incurred year after year. The combined operational losses of the six public sector fertiliser enterprises during the five years 1975-76 to 1979-80 amounted to over Rs 290 crores. Moreover a sizeable portion of investment was locked up in capital works in progress in the fertiliser enterprises in the public sector. At the end of March 1980 funds to the extent of Rs 676 crores were lying blocked in projects and schemes waiting to go on stream. During the Sixth Five Year Plan the objective is to have an outlay of Rs 2,367 crores on the fertiliser industry in the Central sector. If the projects undertaken are not completed expeditiously much of this outlay is likely to remain unproductive.

During 1981-82 the performance of the fertiliser industry has been somewhat better than during 1980-81. However, the improvement has been very much impeded by the power shortage from which several units—both in the public sector and in the private sector — continue to suffer. The total capacity of nitrogenous and phosphatic fertiliser industry by the end of 1981-82 is likely to be 5.31 million tonnes of N and 1.56 million tonnes of P_2O_5 . Production is expected to be of the order of 3.1 million tonnes of N and nine lakh tonnes of P_2O_5 .

The Fertiliser Association of India (FAI) has expressed uneasiness over the impact of the rise in fertiliser prices on the use of fertiliser by the cultivators. According to FAI the sharp increases in fertiliser prices in 1980 made input/output price relationship unfavourable to the farmers and inhibited fertiliser consumption in most parts of the country. The Government of India was aware of this fact and had sought to mitigate the harshness through raising procurement prices which, according to FAI, did not succeed in neutralising the impact of the increased fertiliser prices. The FAI has warned that the recent hike in fertiliser prices will result in a much slower growth in fertiliser consumption. In determining the procurement prices for the forthcoming season the Government would no doubt take note of the observation of FAI.

The extreme disparity in the share of fertiliser consump tion that exists between the different zones of the countr obviously calls for some consideration. During 1980-81 th share of the different zones was as follows : South 27.2 pe cent, Central 26.7 per cent, North 18.5 per cent, West 14 7 pe cent, East 10.4 per cent and plantations 2.5 per cent. A revie made by FAI of the zonewise performance over the five yea period ending 1980-81 disclosed that while the north and wes zones recorded a positive rate of growth through all the fiv years, south, central and east zones recorded a negative rat of growth.

Subsidy for jute goods exports

THE reported decision of the Government to restore cash subsidies to jute goods exports has not come a day too soon. It was overdue; the new cash compensatory scheme fixes a subsidy of 7.5 per cent for carpetbacking, five per cent for sacking if exported through the State Trading Corporation on the basis of global tenders, 7.5 per cent for Australian woolpacks, 10 per cent for decorative fabrics, 7.5 per cent for yarn and twine and 12.6 per cent for cotton bagging. There is no mention of hessian, presumably the quantum of subsidy in its case has not been decided yet, but press reports say, a decision on this will be taken soon. Not knowing the full details of the cash compensatory scheme the industry has not commented as to the adequacy or inadequacy of it. In any case, it is after a bigger and more comprehensive type of support for which the chairman of the Indian Jute Mills Association has been pleading since long.

Judging from the press conference which he has just held in New Delhi, the IJMA chairman is basically after a heavy dose of subsidy and a cut in output at the same time. The present trend of production and stock accumulation, according to him, shows a definite picture of surplus against demand. In concrete terms, the industry expects an output of 1.425 million tonnes during 1980-82 and another extra production of 25,000 tonnes to result from new capacity and introduction of secondhand machinery in several mills. As against this high level of output, the domestic demand is estimated at 900,000 tonnes, leaving a balance of 550,000 tonnes to be exported. The most that the industry expects to sell overseas during the current financial year is 450,000 tonnes, still leaving a surplus of 100,000 tonnes which would push up the stocks to 250.000 tonnes by March 1982. A financially debilitated industry like jute cannot simply afford to carry stocks of such magnitude unless the Government decides to build a jute goods buffer stock, or the move for an orderly international marketing of jute goods is successfully revived. In the absence of any of these positive developments, the industry will not be able to carry such huge stocks for long and mills will be forced to close or curtail their operations under severe financial strain. The IJMA chairman has, therefore, urged the Government to permit a 15 per cent reduction in output straightway so that the possibility of a terribly burdensome surplus emerging eventually can be avoided in due time.

Many may see a kind of pressure tactics in the move to cut output by 15 per cent, but there can be no serious doubt that on the basis of current raw jute prices and other inpu costs, the prices available to the industry in the foreign market must lead to losses. Whether it is as heavy as Rs 12 crores month is by no means conclusively established no matter wha the Indian Jute Mills Association may say, but clearly the dos pressures on the industry have been tremendous while th prices in the market have been rather sticky at levels that d not look remunerative. Something has to be done to end th present state of unsatisfactory affairs, if for no other reaso than that the survival of thousands of jute growing familie depends on the survival of this industry and that the countr needs every rupee of foreign exchange that jute goods earn.

New Delhi has calculated that because of the cash incentive just announced for jute goods exports, the export income wil go up to Rs 400 crores during 1981-82 as against Rs 327.4 crores in 1980-81 and Rs 334.57 crores in 1979-80. In tha case, the reintroduction of the cash compensatory scheme fo jute goods exports will have fully justified itself. But the industry apparently considers these to be a short-term relie only; and, therefore, is asking for more. It wants an immediate order of 100,000 B-twill bags from the Directorate Genera of Supplies and Disposals and also an official directive to the cement industry that it can only use 100 per cent jute bags for packing and not any substitute. Above all, it wants a permanent fund to subsidise exports by imposing a cess, if necessary, on internal sales.

According to reports, the Commerce Ministry considers these demands reasonable and a move is being made to meet the industry's demand to the extent possible. In fact the DGSD has already been asked to purchase 100,000 tonnes of B-twills immediately, and the Finance Ministry has been moved to consider the cess proposal. There is, however, a taxpayer's point of view which the Government ought to consider. How long will it be necessary to subsidise jute exports from the public exchequer ? When will the industry be able to stand on its own feet and compete on equal terms with Bangladesh and synthetics? A bill to constitute a jute board to look after the industry's modernisation and development in the short as well as long term was promised for the monsoon session. There is no sign of that legislation coming along yet.

Paper: Surplus through imports?

GOING by the statistics available from the Indian Paper Makers' Association, the output of paper has been increasing steadily. Last year, it was one million tonnes against a rated capacity of 1.6 million tonnes. During 1981-82, the capacity utilisation is likely to be higher, around 70 per cent, so an output of 1.1 million tonnes is to be expected. If the improved supply of input can be sustained, output should go on increasing. By 1984-85 when the installed capacity is likely to have moved up to at least 2.3 million tonnes, output should be substantially in excess of the 1.5 million tonnes of paper that the country is likely to require then. Thus there would emerge a surplus which the country will have to export to maintain paper prices at the economic level within the country. In fact, there is already the need for exporting some varieties of writing and printing paper due to an excess supply situation at home resulting from a policy of large-scale imports followed over the last three years.

The Indian Paper Makers' Association has complained that despite a substantial increase in domestic output, the State Trading Corporation continues to import paper. During April-June last, 30,000 tonnes of paper of a value of Rs 20 crores has been contracted. During July-August, 10,000 tonnes of paper are likely to come in, at a cost of over Rs 7 crores. Moreover, the public sector Hindustan Paper Corporation has got foreign exchange sanctioned to import 56,000 tonnes for sale in the domestic market, obviously at a heavy foreign exchange cost which may run into Rs 60 crores or so. The association has been urging the Government to stop imports due to an improved supply situation in the domestic market. The industry can raise output by an additional 10 per cent per year, which means an extra output of 1.5 lakh to 2 lakh tonnes. The case for stopping imports is quite strong. On the other hand, measures to help sustain a rising tempo of output should be taken. These should include exports on a long-term basis. There is a readymade market for the cultural varieties of paper in West Asia and South-East Asian countries, and that should be exploited.

At the same time, the Government may have to review the price of white printing paper which was raised to Rs 3,500 per tonne last November taking the cost of inputs prevailing in August 1980 as the basis. The cost has since further gone up, it is claimed by Rs 2,000 per tonne. Such has been the explosion in the cost of inputs.

Finally, with the projected growth of the industry over the next decades due attention should be given to the raw material problem. The raw material problem has already become a constraint and would become increasingly so as more and more paper capacity gets established. Assuming an annual growth rate of 5 per cent in the rated capacity, the total installed capacity of the industry by 2000 AD would be 4.250 million tonnes, corresponding to which the raw material requirement (forest produce and secondary fibres) would have gone up to 12.75 million tonnes. Since availability of bamboo by then cannot exceed four million tonnes per year, the bulk of the raw material has to come from mixed hardwoods as well as from agricultural residues such as cereal straw, bagasse, etc.

Bonds again?

THERE is speculation again whether the special bearer bonds issued in February to unearth black money will be reissued now that the Supreme Court has upheld the constitutional validity of the scheme. By a majority of four to one, the court held that neither the ordinance nor the Act made earlier this year was violative of Article 14 of the constitution and that the ordinance was not outside the ordinance-making powers of the President. However, neither the majority of four judges, led by the chief justice Mr Y. V. Chandrachud nor the dissenting judge, Mr A. C. Gupta, had given reasons for their findings at the time of writing. In such circumstances it is difficult to understand the implications and merits of the judgement but the Union Finance Minister, Mr R. Venkataraman, had strongly defended the scheme in Parliament and outside and this has made the market circles feel that the Government would either come out with a new scheme or reissue special bonds after modifying, if necessary, the terms in the light of the Supreme Court verdict. When the scheme was closed it had fetched the exchequer Rs 384 crores against the budget estimates of Rs 1,000 crores — Rs 200 crores during 1980-81 and Rs 800 crores for the current year. The finances of the Central Government are under strain and it would not be strange if the Government feels inclined to reissue the bonds to reduce the budgetary gap in order to check inflationary pressure.

If, however, the Government thus reissues the bonds, it will lay itself again open to the criticism that was levelled against it at the time of the issue of special bearer bonds. It should not ignore that, apart from the bearer bonds actually putting a premium on tax evasion and seeking to give respectability to black money barons, the scheme has been held at least by one judge of the Supreme Court as violative of Article 14 of the constitution and thus invalid. There are also doubts whether the reissue of the bonds would meet with a response sufficiently to make good the shortfall of Rs 615 crores in the Finance Minister's estimates. It has been pointed out before that the special bearer bonds carrying an implicit rate of 1½ per cent per annum would not be sufficiently attractive to those engaged in black money economy. For black money is not idle liquidity money but circulating money that is found to earn high yields, nearly twice or thrice of that of white money. The voluntary disclosure schemes and now the special bearer bonds scheme have shown that they are not an adequate mechanism to control black money. If at all, such schemes have encouraged hoarders to make more of black money in the safe knowledge that the Government will come forward with yet another scheme of concessions to those who should have been dealt with harshly by law. There is no half-way and coming to terms with black money hoarders will only accentuate the evil that the Government claims to fight and is yet to prove that it really means business.

LETTER FROM COLOMBO

Slower growth of economy

DALTON DE SILVA

THE Sri Lanka economy in 1981 is expected to grow somewhat at a slower pace of about 5 to 6 per cent than the average for the years 1977, when the present Government assumed office, to 1980.

This is the assessment made by Dr Warnasena Rasaputram, Governor of the Central Bank of Ceylon.

In 1980, Sri Lanka's gross national product (GNP) at a constant (1970) prices was estimated at 5.5 per cent. This was less than the high growth rates of 8.2 per cent in 1978 and 6.2 per cent in 1979. The decline in growth in 1980 was attributed mainly to the poor performance of the plantation sector.

In a public address on the economic outlook for Sri Lanka, under the auspices of the Ceylon Chamber of Commerce recently, Dr Rasaputram said though tea production increased by 15 per cent in the first five months of 1981 compared to the corresponding period of 1980, there was a drop of 10 per cent in rubber, 3 per cent in coconut and 13 per cent in industrial production of public sector corporations.

He said favourable developments arising out of the adjustment policies adopted by the Government had resulted in a decline of money supply by 3 per cent in the first five months of 1981, a deceleration of the rate of increase in consumer prices to 9.6 per cent in the first half of the year, lower decline in external reserves and a reduction of the budget deficit.

Value of Sri Lanka exports was expected to rise by 31 per cent in 1981 while the value of the expected rise in imports was around 23 per cent. But in value terms, he said, the deficit in the balance of payments would widen further by 10 per cent over the previous year.

The Central Bank Governor said the ratio of export value which was 52 per cent of imports in 1980 was expected to improve to 54 per cent in 1981. The ultimate result would be that the rate of decline in reserves would be slowed down but this was not significant enough. The rupee value of exports in the first four months of 1981 compared to the same period of 1980 showed an increase of 13 per cent while those of imports rose by 6 per cent and there was an increase in the ratio of exports to imports from 47 per cent in 1980 to 50 per cent in 1981.

He said the overall effect was that the expected reduction in the balance of payments deficit from 19 per cent to 16 per cent of GDP would be realised in 1981. But the adjustment of the economy to favour a faster rate of growth required substantial reduction of this deficit to less than 5 per cent of GDP in the years ahead.

Despite these favourable developments imbalances still remained and were still very large. If the economy was to remain viable an appreciable and a marked reduction of these deficits was a pre-requisite.

Dr Rasaputram said investment activity had been increasing over the last three years and would continue to grow in 1981. The rate of investment in 1981 was placed at 29 per cent of GDP but the total resources available for maintaining this tempo of activity fell far short of the investment demand. Domestic savings which comprised 14 per cent of GDP in 1980 was not expected to rise appreciably. Inward remittances from Sri Lankans living abroad which accounted for Rs 1,600 million in 1980 were likely to rise above Rs 2,000 million thus adding to the total level of resources available for investment. However, there was a large savings—investment gap which had to be met from foreign sources.

He said investment activity in the private sector was beginning to show signs of decline over the peak level of 17 per cent of GDP reached in 1980. A survey of private planned investment conducted by the Central Bank had indicated that planned investment in 1981-82 would be around 70 per cent of total investment for the year 1980-81. In 1980-81 nearly 50 per cent of the planned investment was in machinery and equipment but this ratio was expected to decline sharply to 38 per cent in 1980-81.

Dr Rasaputram said that public sector investment programmes had also been pruned down in 1981 to contain such investment within available financial resources. Stimulus to growth had to come from investment but it should not be at the cost of creating massive imbalances in the economy leading to a high rate of inflation, he said. When there were such contraints to development as lack of skilled manpower, managerial and technical skills and scarcity of capital any attempt to force the pace of investment beyond tolerable upper limits would result in inflation and produce inflationary expectations. A determined effort to combat inflation required the deployment of all available measures effectively and in a timely manner.

The Governor said uncertainties that were widespread today tended to hamper economic growth in general and the decision-making capacity of the business community in particular. Uncertainties in monetary measures would cause greater hardships than most other uncertain variables. Thus there was always a case for medium term monetary targets to reduce that kind of uncertainty. In the absence of targets the business community and agents in various financial and other markets were likely to indulge in intelligent guesses—not necessarily well informed ones—based on forecasts of money supply and of prices, on ministerial hints and reactions to past economic events.

He said it was with this objective of creating less monetary uncertainty and consequently less disturbances that the Central Bank had initiated a process of building up a credit budget based on supply and demand for loanable funds. This would enable the Bank to work out the credit gap in each of the sectors or of each business activity to enable the Central Bank decide on the medium term monetary targets.

The Governor said that in 1980, fiscal policy led to a record budget deficit amounting to 21 per cent of GDP. Now the direction of fiscal policy had been changed. The overall deficit in the 1981 budget estimates was expected to be in the region of 15 per cent of GDP.

Dr Rasaputram said it could be safely assumed that the outlook for the immediate future in the three principal areas of concern—growth, inflation and balance of payments imbalances—were for improvement though inflation and imbalances may not show desired results for a few more years.

SPECIAL ARTICLE

INDO-SOVIET RELATIONS

Expanding economic ties

By VICTOR L. KORNEEV

THE significance of the Treaty of Peace, Friendship and Co-operation between India and the Soviet Union, signed on August 9, 1971, has by no means lessened even though the treaty is a decade old. The Treaty which was initiated during the troublesome days in South Asia, in fact, has attained even greater significance during the last few years and especially nowadays. I shall not deal, however, with the political relevance of the Treaty in the present circumstances. For me, as an economist closely associated with India and moreover with Indo-Soviet economic co-operation during last decade, more important is to share with my Indian colleagues some thoughts on the development of Indo-Soviet co-operation during the span of last decade and its importance in the everyday life of ordinary people of both the countries.

It takes about seven hours to cover (non-stop) the distance between Moscow and New Delhi. These days the climate has somehow played tricks with the weather. So it was 35°C when I left Moscow for India and 25°C when our plane after having penetrated the cloudy Palam skies had landed on the Indian soil. During the last four years while I was dealing with matters of Indo-Soviet economic co-operation from Moscow, many changes have taken place in all spheres of life in India. But relations between India and the Soviet Union seem to be unaffected by all storms of the ocean of Indian politics. The ties between the two countries have grown from strength to strength. India has always been and is now considered by the man in the street in the USSR as a great country populated by friends.

As for Indians, I can judge from my own experience in different places of this country. During the last decade the friendship between our countries has been cemented by bonds of expanding economic ties. Regular exchanges of official visits, the signing of agreements of economic co-operation by the President, Mr L. I. Brezhnev, and the Prime Minister, Mrs Indira Gandhi, in November 1973 and December 1980, the working out of the unique Long-Term Programme of Economic, Trade and Scientific Co-operation, signed in March, 1979, represent basic milestones in the continuous upward development of Indo-Soviet co-operation. The volume of our trade has so enormously increased that you can visit hardly any Moscow shop without purchasing goods of Indian origin.

According to official Soviet statistics India met during 1976-80, 80 per cent

India's trade with Soviet Union: 1951-52 to 1979-80

(Rs crores)

Year	India's exports to USSR	Percentage increase over the previous year/period	India's imports from USSR	Percentage increase over the previous year/period	India's trade balance with USSR
1951-52	6.92		1.39		+5.53
1952-53	0.85	—97.7	0.24	—82.7	+0.61
1953-54	1.15	35.3	0.60	150.0	+0.55
1954-55	2.12	84.3	1.81	201.7	+0.31
1955-56	3.26	53.8	6.21	243.1	—2.95
1956-57	15.50	375.5	16.91	172.3	—1.41
1951-52 to 1956-57 ..		17.5		64.8	
1957-58	16.66	7.5	24.47	44.7	—7.81
1958-59	25.90	5.55	17.21	—29.7	+8.69
1959-60	30.38	17.3	17.19	— 0.1	+13.19
1960-61	28.81	— 5.2	15.87	— 7.7	+12.94
1961-62	32.21	11.8	39.94	151.7	—7.73
1956-57 to 1961-62 ..		15.8		18.8	
1962-63	38.25	18.8	58.64	46.8	—20.39
1963-64	52.10	36.2	68.46	16.7	—16 36
1964-65	77.92	49.6	78.77	15.1	— 0.85
1965-66	92.97	19.3	82.53	4.8	+10.44
1966-67	124.85	34.3	112.05	35.8	+12.80
1961-62 to 1966-67 ..		31.1		22.9	
1967-68	121.79	— 2.5	112.22	0.2	+9.57
1968-69	148.31	21.8	191.70	70.8	+43.39
1969-70	176.37	18.9	171.33	—10.6	+ 5.04
1970-71	209.80	19.0	106.10	—38.1	+103.70
1971-72	208.70	— 0.6	87.30	—17.7	+121.40
1966-67 to 1971-72 ..		10.8		— 4.9	
1972-73	304.80	46.1	114.40	31.0	+190.40
1973-74	286.00	—6.2	254.70	122.6	+31.30
1974-75	421.35	47.3	408.92	60.5	+12.43
1975-76	416.69	—1.1	309.78	—24.2	+106.91
1976-77	453.79	8.9	316.00	2.0	+137.79
1971-72 to 1976-77 ..		16.81		29.34	
1977-78	656.73	44.7	441.8	39.8	+214.83
1978-79	410.59	—37.5	470.6	6.5	—60.01
1979-80	645.65	57.2	728.6	54.8	—82.95
1976-77 to 1979-80 ..		12.47		32.11	
1980(a)	499.07		356.80		
1951-52 to 1979-80 ..		17.59		25.06	

Notes: (a) = April to September   Figures upto 1965-66 are at pre-devaluation rates.

Commerce Research Bureau.

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Goods for export from India to USSR during 1981

Serial No.	Commodity
	I. Agricultural products
1.	Tea, including packaged tea.
2.	Coffee.
3.	Instant Coffee.
4.	Pepper, black.
5.	Cardamon.
6.	Other spices.
7.	Cashew kernels including consumer packs.
8.	HPS Groundnuts.
9.	De-oiled groundnut cakes.
10.	Other de-oiled cakes.
11.	Tobacco.
12.	Cigarettes.
13.	Shellac.
14.	Fruit juices.
15.	Fresh and canned fruits.
16.	Fresh and dehydrated vegetables, including cotton and garlic.
17.	Anato seeds.
18.	Marine products.
19.	Cut flowers.
	II. Minerals and Ores
20.	Mica.
21.	Mica Products.
22.	Alumina.
23.	Barytes.
24.	Pig Iron.
	III. Chemicals and allied products
25.	Medicine and Pharmaceutical preparations.
26.	Raw materials for production of medicines.
27.	Paints, enamels and varnishes including marine paints.
28.	Lemon Chrome.
29.	Dye-stuffs and intermediates.
30.	Castor oil.
31.	Essential oils : (*a*) Sandalwood oil. (*b*) Other essential oils.
32.	Detergents, scouring powder and other cleaning agents.
33.	Cosmetic goods.
34.	Tyres.
35.	Linoleum.
36.	Surgical gloves.
37.	Vacuum flasks and refills.
38.	Wire enamel (lac "Terebac").
39.	Raw Opium.
40.	Brushes, all types.
41.	Bristles.
	IV. Leather and Leather manufactures
42.	Goat skins, semi-tanned and tanned.
43.	Finished leather.
44.	Leather shoes
45.	Shoe uppers.
46.	Chappals.
47.	Leather haberdashery, including gloves, garments belts, etc.
	V. Textiles
48.	Printed cotton cloth and other cotton piecegoods.
49.	Industrial fabrics.
50.	Paper maker felts.
51.	Bed linen, towels and handkerchiefs.
52.	Cotton sewing thread.
53.	Readymade garments.
54.	Manufactures of handloom.
55.	Cotton hosiery.
56.	Woollen knitwear.
57.	Woollen carpets, hand and machine made.
58.	Jute bags.
59.	Jute cloth.
60.	Raw jute.
61.	Coir manufactures.
62.	Coir yarn.
	VI. Engineering Goods
63.	Automobiles/Storage batteries, traction and other batteries.
64.	Garage equipment including spray booths, petrol, dispensing equipment and others.
65.	Hand tools, pneumatic tools and tool kits.
66.	Aluminium power cables.
67.	Dry core cables.
68.	Dry batteries.
69.	Polygraphic equipment.
70.	Steam boilers, including coil type, thermo-block incinerators, etc.
71.	Electric Instruments, Components and equipment.
72.	Computer software.
73.	Sanitary ware, sanitary fittings and pipes and fittings thereof.
74.	Machinery and equipment manufactured at industrial enterprises built in India with the assistance of USSR.
75.	Textile Machinery.
76.	Automobile ancillaries.
77.	V Belts.
78.	Wire ropes.
79.	Machine tools.
80.	Rolled steel products.
81.	Line pipes (ERU) and spirally welded.
82.	Iron and steel castings and forgings.
83.	Fork lift trucks.
84.	Freight containers.
85.	Electric motors up to 100 KW.
86.	Industrial valves.
	VII. Other items
87.	Wood veneers of tropical wood.
88.	Spectacle frames.
89.	Handicrafts, including manufactures of brass, white metal, semi-precious stones, wood, ivory, etc.
90.	Monkeys.
91.	Sports goods.
92.	Glazed tiles.
93.	Fire hoses.
94.	Books, periodicals, postal stamps, gramophone records and cassets
95.	Miscellaneous goods.

Source : Directorate General of Commercial Intelligence and Statistics, Calcutta, Government of India, *Indian Trade Journal*, Vol. 296, No. 1, April 1, 1981.

of USSR's tea requirements, 50 per cent of coffee, 100 per cent of cashew nuts, 25 per cent of tobacco, 83 per cent of jute and 92 per cent of jute bags. A tin of Darjeeling tea is really a hot-cake in Moscow. The majority of Moscovites wear Ludhiana sweaters during winter colds, use Indian detergents, toilet soaps, toothpaste, shampoo and other consumer goods in their everyday life. A special shop "Ganga" in Moscow is being frequented by hundreds of people every day. Business people and experts travel in such vast numbers between our two capitals that it is advisable to book your air ticket at least two months in advance.

Thousands of Soviet engineers and workers have been associated in their lives with India, where they have worked or are working at the numerous projects of Indo-Soviet economic co-operation—steel plants at Bokaro and Bhilai, engineering plants at Hardwar, Ranchi and Durgapur, oil refinery at Mathura, Calcutta Metro Construction etc. The fees for their vast experience are uncomparably lower than those paid to the similar western experts, but the willingness to help in training their Indian colleagues is sometimes boundless. The statistical data give an appropriate picture in this respect: More than 120,000 Indian engineers and qualified workers have completed training with the assistance of Soviet specialists both in India and the USSR. Out of them 65,000 were trained during the last decade. It must be noted that to send a qualified Soviet specialist to India is not a simple matter if you take into consideration the relative scarcity of labour, especially skilled labour, in the growing Soviet economy.

Goods for export from the USSR to India during 1981

Serial No.	Commodity
	I. Machinery equipment and spare parts.
1.	Machine tools and metal working equipment welding equipment, scraps bricqueting presses.
2.	Mining, prospecting oil drilling, petrological and survey equipments and instruments and spare parts.
3.	Construction and earth moving equipment and spare parts.
4.	Power and electro-technical equipment turbines, generators and spare parts.
5.	Agricultural machinery, harvesting combines spare parts, including tyres for tractors and equipment and spares for mechanised farms.
6.	Textile machinery and equipment.
7.	Printing machinery and equipment including roto-print machines.
8.	Cinematographic and studio equipment.
9.	Air transportation means including helicopters other equipment and spare parts.
10.	Trucks and spare parts.
11.	Sea and river ships, dredgers, and marine engines and other equipment, including tankers, cargo ships and spare parts.
12.	Components equipment and raw materials for manufacturing programmes of projects of Indo-Soviet Co-operation (completed under construction) and replacement equipment for the projects.
13.	Spare parts to the equipment delivered for projects built with Soviet assistance.
14.	Steel mill rolls.
15.	Ball and roller bearings.
16.	Gas cylinders.
17.	Abrasive goods metal cutting and measuring tools, universal assembling fixtures and steel die blocks.
18.	Laboratory, testing equipment, control measuring and optical instruments, scientific apparatus and metal testing machinery (including requirements of "Instrumentation Limited" Kota).
19.	Medical and veterinary equipment and instruments including dental equipments.
20.	Electronic instruments, computors data processing instruments including tele-communication equipment, professional equipment and components and raw materials for electronic industry.
21.	Other machinery and equipment including transport, lifting and handling equipment rolling equipment, equipment for chemical, food processing meat processing plants, grain storage and handling equipment and grain storage equipment and equipment for rubber industry, equipment for vacuum flask, manufacturing crushing, grinding and dressing equipment pumps, compressors and spare parts for Soviet machinery and equipment supplied to India.
	II. Crude Oil and Petroleum
22.	Crude oil.
23.	Petroleum products (Kerosene and diesel oil).
24.	Oil and lubricants.
	III. Fertilisers.
25.	Urea.
26.	Muriate of Potash (60 per cent K_2O).
27.	Ammonium Sulphate.
	IV. Chemical and Pharmaceutical products
28.	Chemical, including laboratory reagents.
29.	DDT (75 per cent).
30.	Sulphur.
31.	Drugs, pharmaceuticals, raw materials and intermediates required for their production.
	V. Steel products
32.	Rolled Steel products.
	VI. Non-Ferrous Metal
33.	Zinc.
34.	Nickel.
35.	Platinum.
36.	Palladium.
	VII. Other products
37.	Cotton.
38.	Asbestos.
39.	Cement (in bulk).
40.	Refractories.
41.	Newsprint.
42.	Wood pulp.
43.	Pedigree sheep and other animals.
44.	Books, periodicals, postal stamps, gramophone records and cassettes.
45.	Miscellaneous goods.

Source: Directorate General of Commercial Intelligence and Statistics, Calcutta, Government of India, *Indian Trade Journal*, Vol. 296, No. 1, April 1, 1981.

Unemployment in the USSR was ended in 1936.

A distinctive feature of Soviet assistance to India (which sometimes gives heavy headaches to my colleagues) is an unwritten obligation to help the enterprises built in this country within its framework during the difficult periods of their operation. A recent example is Heavy Engineering plant at Ranchi and MAMC plant at Durgapur which were facing during the last few years depleting order book. To help these plants to overcome the difficulties it was decided to place sizable Soviet orders with them for the supply of machinery and equipment.

It is rightly pointed out by observers that the volume of loans extended by the USSR to India is modest as compared to the huge injections of western aid. Thus during last decade the aid authorised by the USSR to India totalled Rs 641 crores or 5.8 per cent of the total foreign aid during this period. But any unbiased writer ought to bear in mind some fundamental difference in the nature of these aids. First, it concerns the origin of loans. While western governments are in the position to utilise the tax payers' money to help exporters during the difficult periods of world economic recession, the USSR while developing its economy does not have any idle stocks of machinery and equipment. Secondly, the Soviet loans as well as Soviet assistance to India as a whole are directed to the most needy sectors of the Indian economy in which projects of national importance are implemented. During 60s and 70s these were metallurgical and heavy engineering plants; now-a-days at the time of energy crisis the Soviet assistance is directed towards the development of power industry as it can be seen from the provisions of the agreement on economic and technical co-operation signed on December 10, 1980 by the leaders of our two countries.

What is the aim of Soviet economic assistance to India? The answer is obvious to any researcher. The USSR wants to help strengthen the economy of India for the benefit of peace and stability in this important part of the world. This may sound a somewhat stilted statement but I can express it in no other way and it is good to remember this while discussing the historical relevance of the Treaty of Peace, Friendship and Co-operation signed a decade ago.

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COVER STORY

Debentures: Key to innovative resource mobilisation

By D. P. PANDEY

DEBENTURES, being a loan contract, are one of the usual forms of resource mobilisation by companies. But, what makes this type of borrowing important now is the recent spurt in the issue of debentures due to its inherent advantages both for the issuing company and the investor. The fact that the total debentures issued during the first half of 1980 amounted to Rs 26.7 crores representing 41.1 per cent of the total capital mobilised as against Rs 14.2 crores during the comparable period of the preceeding year brings into focus the emergence of debentures as a popular medium for attracting investments. (One press report last week has it that the public response to convertible debenture issues of the corporate sector is so good in recent months that the Government now expects the current financial year to end with Rs 400 crores of capital raised against issues approved by the Controller of Capital Issues.) However, until recently, public response to debentures was very poor due to a low yield. Only major financial institutions, *viz* UTI, LIC and GIC were major subscribers. It amounted to transfer of funds from the public financial institutions to the corporate sector.

Raising long term capital through debentures is very attractive for companies as it does not dilute control which happens in the case of shares and institutional borrowings with mandatory convertibility clause. Servicing of debentures being tax deductible reduce the after-tax cost by half, while the same does not apply in case of ordinary and preference shares. Debentures are cheapest source of funds as compared with other forms of borrowing. The present ceiling interest rate on debentures is below the rates currently payable on public deposits or short term bank borrowing.

Mode of issue

The mode of issue of debentures is identical to the release of shares through prospectus. Though there is a provision for the payment of the amount in instalments, generally it is paid in a lumpsum. The debenture holder, unlike the share holder, is not treated as an owner, but a creditor of the company as the debenture is an evidence of debt to the holder. According to the Company Act, debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge on the assets of the company or not.

The issue of debentures which can be either through rights or prospectus has to be cleared by Controller of Capital Issues (CCI). MRTP regulations stipulate that debt should not exceed 50 per cent of the net block of the company, while CCI puts the condition that debt-equity ratio should be generally below 2:1 at the time of issue, debt being defined to include the borrowings, as also proposed issue repayable not earlier than five years from the date of borrowings and preference shares redeemable within 12 years.

Rights debentures issued for raising long term working capital finance are subject to certain guidelines prescribed by CCI in 1978. Besides there being a ceiling on interest rate, their use can be made only for working capital finance but not for additions to fixed assets. The issue cannot exceed 20 per cent of paid up shares and free reserves, or the working capital gap defined to include gross current assets, loans and advances less long-term working capital funds, whichever is lower. The total value of the debenture issue is subject to a maximum of Rs 2.5 crores, though relaxed by CCI in practice. Further, debt-equity ratio cannot exceed one, including the proposed issue.

These, guidelines have been modified extensively in 1980 and made applicable to the issue of secured debentures by public limited companies whose shares are listed on stock exchanges, for the purpose of financing expansion and diversification as also working capital needs. The debt-equity ceiling has been raised to 2:1 with further relaxation possible for capital intensive projects in industries like, fertiliser, petro-chemicals, cement, paper, shipping etc. The stipulations that the debenture issue cannot exceed the working capital gap has also been dropped.

Four categories

There are four categories of debentures, *viz*, registered, secured and unsecured, redeemable and convertible, each having relevance to particular business and environment. The registered debentures are those which are registered in the names of the holders and such names are preserved in the books of the company. Interest is payable to the registered holder or as authorised by him. A company may release debentures payable to the bearer and for such bearer debentures, no register of holders is maintained. They are transferrable by delivery of the debentures to the transferee. But such bearer bonds when secured should be entered in the register of charges. Debentures which carry charge on some assets or property of the company are treated to be secured while debentures which do not carry any charge on assets of the company are deemed to be unsecured.

Debentures, in general, are redeemable. The principal money, in case of such debentures is paid to the investor on the expiry of the fixed term. Debentures may be redeemed either at the issue price or at a higher price and they can be re-issued by the company. Non-redeemable debentures, on the other hand, are issued without any fixed date for redemption and therefore, such debentures are payable only in extreme circumstances, like winding up of the company. The creditor cannot force the company to repay immediately.

Most popular

The most popular form of debentures widely circulated by companies is the convertible ones. A major advantage of this is that they possess a fixed maturity date and they earn a fixed interest annually. Further, they can be converted into ordinary shares of the issuing company under specified terms and conditions. The period during which the investor can exercise his option for exchanging debentures for share is determined by the terms and conditions which vary from one company to another. Convertible debentures which can be issued to finance capital expenditure provide an effective means of raising long term fin-

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COVER STORY

ance, especially for companies embarking on major expansion. These debentures stipulate low conversion price relative to the prevailing market price for the shares. Consequently, this attractiveness is based on fairly definite prospect of capital gains on the convertible component at the time of conversion.

Both companies and investors find convertible debentures advantageous. For the companies conversion facilitates extinction of the funded debt through transforming it into equity. Conversion provides flexibility to the capital base of the company and makes mobilisation of funds at a lower cost. Conversion also narrows down the loan capital of the company besides widening the share structure. In such an event, the company normally faces an accommodative market.

The recent enthusiasm among investors in subscribing to convertible debentures can be traced to the many advantages they offer to the subscriber. High return, minimum risk, safety of principal as well as interest attracts the investors. They prefer convertible debentures because of right for equity shares, anticipation of increased dividends, higher opportunity benefits due to realisation of appreciation earlier rather than to wait till the maturity and income tax exemptions of the dividend received upto Rs 3,000 under section 80L of IT Act. The interest on debentures, on the other hand, is taxable.

Benefits of convertible debentures as against non-convertible ones may be better illustrated by an example. Suppose a person purchases 100 units each of Rs 100 convertible and non-convertible debentures. Investments will total to Rs 10,000 bearing rate of interest of 13.5 per cent in both cases. We further assume that in the third year ¼th of the investments in case of convertible debentures, are converted at par in equity and loan repayment starts, in both cases, in the 8th year. Income earned in both cases is as is shown in Table 1.

Total gains on interest earnings, dividend earnings, say, at the rate of 10 per cent, appreciation in converted share value, say, by Rs 5 per share, is Rs 12,112.50 which is higher by Rs 1,650 as compared to earnings in case of non-convertible debentures. This gain may even be higher if we take into account the tax benefits, bonus shares and the fact that share values will appreciate more than Rs 5 as also higher dividend rates with the level of economic developments, inflation rate and stability attained by companies.

Recent development

Convertible debentures, however, are a recent development in the field of our corporate management. The lead was taken by Standard Mills in 1966. The reception was so encouraging that the company resorted to another public issue of convertible loans in 1971-72. The success recorded by Standard Mills attracted several companies including Metal Box, Bharat Bijlee, National Machinery Manufacturers etc and those also met with good response.

Table I: Gains from debentures

(in Rs)

Year	Convertible Debentures				Non-convertible Debentures
	Interest earned @ 13.5%	Shares/earnings: Unit of Rs 10 each (Nos.)	Shares/earnings: Appreciation in shares (Value)	Shares/earnings: Dividend @ 10%	Interest earned @ 13.5%
1	1,350.00				1,350.00
2	1,350.00				1,350.00
3	1,012.50	250 unit	1,250.00		1,350.00
4	1,012.50	,,		250	1,350.00
5	1,012.50	,,		250	1,350.00
6	1,012.50	,,		250	1,350.00
7	1,012.50	,,		250	1,012.50
8	675.00	,,		250	675.00
9	337.50	,,		250	337.50
10	337.50	,,		250	337.50
Total	9,112.50		1,250.00	1,750	10,462.50

Recently, the debentures issues of Reliance, Tata Engineering, East India Hotels, Indian Rayon etc, turned out to be big success with overflowing subscription. The convertible debenture issue of Rs 0.75 crores to the public by Hindustan Development Corporation was oversubscribed 72 times, the largest extent of oversubscription reported during the year. The convertible debentures issue of Rs 24 crores by Reliance Textile Industries Limited was oversubscribed 8.3 times, involving application money of nearly Rs 60 crores. Similarly, Rs 29.3 crores convertible debenture issue of Tata Engineering and Locomotive Co Ltd was oversubscribed six times, entailing application money of Rs 88 crores.

A company normally goes for the issue of debentures when there is a climate of depression and stagnancy in the capital market. The risk involved in such times is minimum. When there is a boom in the capital market, it would be advantageous for the companies to go for equity issues. Further, companies with a sound economic base and aspiring for further growth would like to build up capital through debentures as it would facilate continued profits to share holders. Another plus point of debentures is that it would not disturb the stability of the company. Only running companies can have the facility of debentures as such debentures are secured by mortage of fixed assets of the issuing company.

Business strategy

Now, using the tool of debentures has come to stay as a major business strategy for improving the capital structure of companies. Available data exhibit the phenomenal growth of debentures in recent times. From a mere total of Rs 4.3 crores in 1971, the debentures issue of non-government, non-financial public limited companies showed a two-fold increase as it moved up to Rs 9.8 crores in 1978 which marked a sudden spurt in the demand for debentures. Again it increased by seven times over 1978 when the total figures touched Rs 66.8 crores in 1979. The first half of the year 1980 also witnessed the uptrend in debentures as the total figures amounted to Rs 26.7 crores as compared to Rs 14.2 crores in comparable period of 1979

Another noticeable feature is the reduction in the gulf between the total amount of debentures

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sents/acknowledgement of proposals granted for the same. The total amount of debentures stood at Rs 4.3 crores or 16.9 per cent of the consent/acknowledgements of proposals granted which totalled Rs 25.5 crores during the year 1971. The figure for the year 1978 at Rs 9.8 crores or 20.1 per cent of the consent/acknowledgements of proposals granted at Rs 48.8 crores reflects the narrowing gap between them. The gap is further narrowed in 1979 as debentures issued amounted to Rs 66.8 crores marking 48.1 per cent of the consent/acknowledgements granted at Rs 138.8 crores. The first half of the year 1980 showed that the consents/acknowledgements of proposals granted at Rs 26.6 crores were issued totally and subscribed fully.

During the year 1981-82 an amount of Rs 125 crores is estimated to be raised through debentures of a number of companies. Reliance, Voltas, Indian Aluminium, Straw Products, Shree Dinesh Mills, Ferro Alloys Corporation, Rustom Mills, Shree Vallabh Mills, Fibre Pilkington are some of the companies going in for debentures.

Restrictive credit policy

The anxiety of some of these companies in resorting to debentures can partly be attributed to restrictive credit policies which makes availability of institutional finance difficult. The recent budgetary hike on interest rate ceiling on debentures to 13.5 per cent was chiefly designed to make debentures more attractive. The ceiling interest rate on debentures which was just 7.0 per cent in 1963-64, was raised to 8.0 per cent in 1970-71, to 10.5 per cent in 1974-75, to 11 per cent in 1979-80 and further to 12 per cent in October 1980. Thus the raising of the ceiling on interest rates can be seen as evidence of the government's intention of making companies depend less on financial institutions and move more towards mobilising funds from the population of investors.

The boosted interest rate of 13.5 per cent itself, may not be very attractive to investors as they have wide options before investing their funds. Public deposits accepted by companies offer a maximum of 15 per cent interest though a majority of companies including few public sector organisations offer less than the ceiling limit for a deposit covering three years. Moreover, several companies have defaulted in repayment of deposits with them on maturity. This makes debentures, especially convertible ones, a better medium of investment as they provide for the conversion into equity shares.

Debentures ensure a reasonable return for the financial institutions. These institutions, therefore, in most cases, subscribe to the maximum permitted limit of 60 per cent. Companies have to ensure a minimum subscription of 75 per cent of the total amount to be raised. And, as about 60 per cent is subscribed by financial institutions, the remaining 15 per cent is generally raised from banks, trusts and individual investors.

Table 2 : Debentures of non-government, non-financial public limited companies

(Rs in crores)

Year	Through Prospectus			Through Rights		Consents/ acknowledgements of proposals granted	% of amt of debentures issued to total Consents
	No. of Issues	Amt. offered	Amt. subscribed	Amount offered	Total Amt. offered		
1	2	3	4	5	6	7	8
1971	5	4.3	2.1	—	4.3	25.5	16.9
1972	5	25.0	21.7	—	25.0	50.2	49.8
1973	4	2.2	1.5	0.5	2.7	22.0	12.3
1974	4	5.0	2.8	—	5.0	27.1	18.5
1975	3	1.3	1.2	—	1.3	34.0	3.8
1976	1	1.0	0.3	2.3	3.3	54.8	6.0
1977	1	5.5	0.02	—	5.5	33.9	16.2
1978	1	2.0	3.7	7.8	9.8	48.8	20.1
1979	1	7.0	20.7	59.8	66.8	138.8	48.1
1980*	—	—	—	26.7	26.7	26.6	100.4

* January to June.

Bonds

Bonds which are synonymous with debentures are issued by national and state governments, local and public statutory bodies, such as port trusts, town authorities, municipal corporations, electricity boards and other public sector bodies, promising to return borrowed funds along with the specified interest. These bonds are perpetual and redeemable. The former cannot be redeemed, bears fixd interest and provides for capital gains. The price and yield on such bonds have an adverse relation as to their movement. The latter, on the other hand, are redeemable within a range of dates. The purchaser of these redeemable bonds is concerned with two sets of future payments—annuity over remaining life of the bond and a lumpsum at a stipulated date in future. The degree of risks of both the type of bonds varies according to the issuing authority and size of the particular issue.

The statutory bodies, financial institutions and Government issue these debenture-bonds for financing their developmental projects. These debenture-bonds are generally subscribed by commercial and cooperative banks, Life Insurance Corporation, Unit Trust, charitable trusts, and joint stock companies. Inspite of unduly low interest rates as compared to the prevailing market rate, these debentures (bonds), having captive market, are quite active and popular as they offer safety, liquidity and assured income as also advantages of capital appreciation. Among these bonds, issues by Bombay Municipal Corporation and Industrial Finance Corporation are generally over-subscribed. Preference for these issues comes from stringency in money market and the gradual upward revision of interest rates for the comparable loans.

New dimensions

Thus, debentures have assumed a new dimension. There are indications that the Indian corporate community would resort more and more to this form of augmenting their capital base. Various stock exchanges in India have on their lists some 250 debentures with Bombay and Calcutta stock exchanges representing about three-fourth of the listed debentures.

A study undertaken by Bombay Stock Exchange showed depreciation of the market value of debentures during 1979. The market value of 185 debentures was Rs 479.28 crores as compared to the issue amount of Rs 503.59 crores representing a depreciation of 5 per cent. This may be attributed to various factors

Continued on page 469

BOOKS & IDEAS

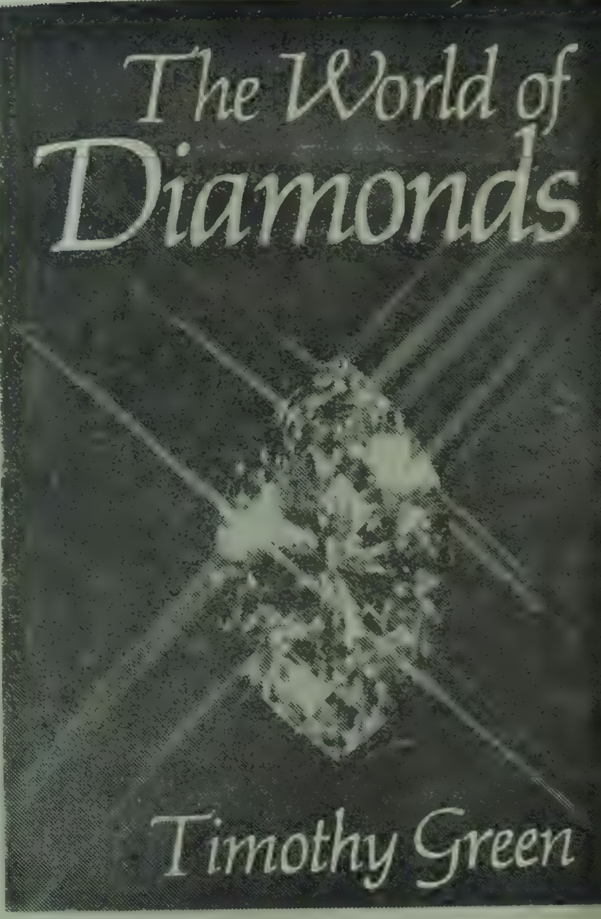
The world of monopoly and illicit trade

TIMOTHY Green is a well known figure in the gold world. As consultant, he helps to bring out the authoritative annual reports on gold of Consolidated Gold Fields Limited. On his visits to India, the Bombay Bullion Association arranges a meeting of its members for Mr Green to address them, and top bureaucrats of the Finance Ministry and Planning Commission listen with respect to his assessment of gold price movements and smuggling of gold into India and silver out of India. An experienced journalist, obviously he developed interest in diamonds along with gold and, as the blurb says, travelled 50,000 miles and visited 15 countries to put together "the first ever inside story of what is a ruthless, secretive and often illicit world."

The earlier editions of *Encyclopaedia Brittanica* devote some space to Indian diamonds of which perhaps the most famous was the 108.93 carat Kohinoor, now forming part of the British crown jewels and which was reportedly owned as far back as 1304 by the Raja of Malwa. At one time, the industry did flourish in India and the French merchant, Jean Baptiste Tavernier, wrote that he found 60,000 workers employed in Kolar group of mines in 1645 and that these mines had been discovered about 100 years previously. But the mining of diamonds in India is more or less extinct and Mr Green's world of diamonds essentially consists of the mining in African countries, the empire of De Beers and Cecil Rhodes, Sir Ernest Oppenheimer and Harry Oppenheimer who helped to build the monopoly of the Central Sales Organisation of De Beers through which 80 to 85 per cent of the world's diamonds are marketed. Even Russia makes use of this organisation to market its diamonds. In fact, it would appear the Soviet Union prefers to leave the marketing of diamonds to the Diamonds Trading Company (DTC), the main arm of De Beers Central Selling Organisation—'the syndicate' to many diamond traders.

India figures is Green's book as an importer of rough diamonds and exporter of polished diamonds. Today, not a single country can rival India in polishing small diamonds and Green records such enterprise has made India a dominant new force in the world of diamonds in the 1970s. She overhauled both Antwerp (Belgium) and Tel Aviv (Israel) in the weight of diamonds imported by her manufacturers. Sixty per cent of all diamonds are now cut and polished in India and Green notes that the resulting finished goods were actually the country's top export earner in 1979, grossing nearly $900 million.

Between them a dozen African countries (Angola), Botswana, Central Africa Republic, Ghana, Guinea, Lesotho, Liberia, Namibia, Sierra Leone, South Africa, Tanzania and Zaire) produce 75 per cent of the world's diamonds. Zaire is, as Green points out, a leader judged in terms of carats (12 to 15 million carats annually) but many of her diamonds are only of industrial quality. The real wealth is in South Africa, Botswana and Namibia who between them produce more than half of all the jewel stones. Remarkably enough it is not only Russia but also the newly independent countries of Angola, Sierra Leone, and Tanzania that rely on South Africa-based De Beers organisation for marketing of their rough diamonds and the trade is a big one. Diamond sales by the CSO came to about $2.5 billion in 1980 and the world trade in polished diamonds is worth over $15 billion. The 17 mines in De Beers group itself still control 90 per cent of South African diamond output and 100 per cent in Namibia, Botswana and Lesotho. The Russian output is conservatively estimated to be over 10 million carats a year (and is more likely to be between 11 and 12 million) making the Soviet Union the world's second largest producer after Zaire but, unlike in Zaire, over a quarter of the Russian output is of high quality gems. Explaining the relationship of De Beers with African producers, an executive of De Beers told Green: "We stride across Africa in a very satisfactory way in all sorts of very strange places. Part of the secret is that we respect confidences. We don't talk much. We have been able to convince governments that the system works, and that it is in their interest and ours that it continues to work."



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The diamond desert of Namibia partly explains why South Africa is defying the United Nations and not allowing its hold to loosen on that country. Green points out that though the production of diamond desert has peaked out from 2 million carats down to around 1.6 million, it is a continuing treasure house. "So, the real issue as Namibia gains independence after more than 60 years of dominance by South Africa is who will control De Beers Consolidated Diamond Mines of South-West Africa (CDM). At present, it is 100 per cent owned by De Beers and their lease on the diamond desert expires only in 2010. Well ahead of independence, De Beers astutely transferred CDM's office to the Namibian capital, Windhoek. Clearly, the Namibian government will eye the wealth of CDM whose taxes constitute no less than 50 per cent of that country's revenue, with special attention. Already CDM pays 64 per cent of its mining profits to Namibia. Will the new regime rest content with that? Or like their neighbours in Botswana, will they reduce De Beers' stake in CDM, perhaps opting for a 50 : 50 share? Outright nationalisation is conceivable, especially if the left wing Swapo eventually gains power."

No one tries to deny that De Beers selling organisation is a cartel, but in De Beers' eyes at least it is a benovolent one. Green quotes Harry Oppenheimer as saying: "Whether this measure o control amounts to a monopoly I woul not know. But if it is, it is certainly monopoly of a most unusual kind. Ther whether as a producer, dealer, cutter, developer or customer who does not benefit from it. It produces not only shareholders in the big diamond companies, but also the miners they employ and the communities that are depending on their operations. Well beings of tens of thousands of diamond diggers of all the races is depending on its maintenance."

The best known address of the diamond business is the Diamond Trading Company, 17 Charterhouse Street, London, ECI. Every five weeks, 300 or so of the world's foremost diamond dealers and manufacturers pass through the massive doors, with diamond shaped glass panels, to spend nearly $300 million on rough gem diamonds. Although each has to accept or reject the packet of goods that is waiting for him without any real negotiations on price or content, everyone turns up for this 'convocation', with religious regularity. Green compares the CSO to the sponge that absorbs diamonds in bad times and disgorges them in good. The structure of the diamond business that was originally built up by Sir Ernest Oppenheirmer has, according to him survived for half a century because of the comfortable feeling of stability that it engenders in miners and manufacturer alike. The CSO spends upwards of $40 million annually for just not selling the idea 'a diamond is forever' but also to make sure that if the inventory is laden with a particular size of diamonds, the customer is wooed to buy them. The interesting part is that it is an American advertising agency that handles the diamond campaign in the most lucrative market for gems and diamonds but American anti-trust legislation makes it impossible for the mining house of De Beers, as an effective monopoly in diamonds, to maintain any presence in the United States.

Will this monopoly last? Zaire has already on June 1 withdrawn from De Beers' Central Selling Organisation and subsequently claimed that the prices realised for the first sale of 6,20,000 carats were 37 per cent higher than those offered by De Beers. Its state mineral exporting board, Sozacom, has signed marketing contracts with independent companies. This is reportedly worrying De Beers since Zaire's example may be followed by other African countries. Another source of worry may come from Australia which has reportedly found mines capable of yielding 25 million carats of diamonds annually against the current world production of 50 million carats, and not the least source of concern for De Beers is when Namibia attains freedom. If Zaire's example is followed by Australia and Namibia, Russia could follow in their foot steps and De Beer's monopoly will certainly be then threatened though Harry Oppenheimer is confident that De Beers' dominance in diamond trade will not be challenged.

Green devotes a full chapter to smuggling of diamonds (in diamond circles smuggling is not a popular word and instead they are called 'submarine goods'). The very nature of the goods, Green points out, makes smuggling endemic every step of the way from mine to cutting centre to buyer. The flourishing traffic in rough diamonds, either stolen in the mines themselves or mined illicitly, in Zaire, Angola, Sierra Leone or Brazil involves, he says, at a conservative estimate at least $100 million a year. "Wholesale value of polished goods going into Italy and Spain, for instance, is at least $250 million a year and very little is declared; Hongkong imports close to $700 million worth of diamonds each year, and most depart again by submarine for Japan, South Korea, Thailand, Indonesia and the Phillippines. Even Iran was soaking up $50 million a year in smuggled goods from Antwerp or Bombay until the Ayatollah replaced the Shah. Already that is $1 billion a year without considering North Africa, South America, the United States or Britain", Green comments. Incidentally Green makes a reference to the appearance of Russian polished diamonds in India on the eve of 1980 parliamentary elections which was reported in the *Market Gossip* column in *Commerce* first and was blown up into a full length story by *Onlooker*. He seems to agree that these diamonds were used to finance the elections of some chosen candidates.

Green is so fascinated by the glittering world of diamonds that he somehow or other takes a dislike to the advance of diamonds "as a cure for industrial headaches". The market is expected, he says, to double in the 80s and since natural diamond production cannot keep pace, the real growth will be in synthetics. "Somehow that takes a little of the magic out of diamonds", he laments.

D. B. Mahatme

In brief

Handbook on Project Appraisal & Follow-Up (A Practical Guide)

by D. P. Sarda,

Govind Prakashan, 204 *Saraswati Kunj,* 90, *S. V. Road, Goregaon, Bombay* 400 062; 1981; *Pages* 125; *Price Rs* 15.

Mr Sarda of the Bankers Training College of the Reserve Bank of India has written this book to guide the executives in banks and financial institutions in the techniques of project appraisal and follow-up of the projects financed by the banks and financial institutions. Dr I. G. Patel, Governor, Reserve Bank of India, has written a foreword commending the book.

Taxman's Direct Taxes Law and Practice

by Vinod K. Singhania, Assisted by Jeewan Singhania.

Taxman Publications (P) Ltd, 1871 *Kucha Chelan, Khari Baoli, Delhi* 110 006; 1981; *Pages* XV, 782; *Price Rs* 50.

This book offers a discussion of the laws relating to direct taxation in the country. It is intended for the students of law.

BOOKS RECEIVED

Monthly Bulletin of Statistics June 1981, Vol xxxv, No. 6, published by United Nations Publications and may be obtained from bookstores and distributors throughout the world. Write to: United Nations, Sales Section, New York or Geneva; Pages 237; Price not mentioned.

Measures for Saving Materials in Engineering Industries published by Economic Commission for Europe, for obtaining copy write to: United Nations, Sales Section, New York or Geneva; Pages 175; Price US $ 14.00.

Japan—OECD Economic Surveys—July 1981, published by Organisation for Economic Co-operation and Development, 2, rue Andre-Pascal, 75775, Paris, CEDEX 16, France; Pages 80, plus one statement; Subscription US $ 60.00.

Survey of Economy, Resources and Prospects of South Asia by M. L. Qureshi published by Marga Institute, 61, Isipathana Mawatha, Colombo-5, Sri Lanka, in association with Third World Foundation for Social and Economic Studies, London; Pages 274; Price not mentioned.

United Kindgom—OECD Economic Surveys—July 1981, published by Director of Information, OECD, 2, rue Andre-Pascal 75775, Paris CEDEX 16, France; Pages 67 plus basic statistics—international comparisons; Subscription US $ 60.00.

Report of the Working Group on Khadi and Village Industries, September 1980, constituted by the Planning Commission, Government of India, Yojana Bhavan, New Delhi and published by B. B. Betgiri, Director of Publicity, Khadi and Village Industries Commission, Gramodaya, Irla Road, Vile Parle (West), Bombay 400 056, on behalf of Ministry of Rural Construction, Government of India. New Delhi; Pages 224; Price not mentioned.

Economic Survey of Europe in 1980, prepared by the Secretariat of the Economic Commission for Europe, Geneva, published by United Nations, Sales Section, New York; Pages 243; Price US $ 17.

The economy in Parliament

From OUR NEW DELHI BUREAU

Replacing petrol by electronic power

Q. Mr A. T. Patil

Will the Minister of Science and Technology be pleased to state:

(a) whether Government propose to replace petrol and allied sources of energy for motors by electronic power;

(b) if so, the progress, if any, made in that direction; and

(c) the economic and other aspects of this change?

A. Prime Minister, Mrs Indira Gandhi

(a), (b) & (c): A statement is laid on the Table of the House.

Solar photovoltaic cells and panels, which convert sunlight into electricity, have been developed under the research and development programmes of the Department of Science and Technology. These can be used to provide electrical power to run electric motors for a variety of uses, including agricultural pumpsets, thereby replacing the use of diesel. Several demonstration photovoltaic water, pumping units have been installed for field testing and performance evaluation. A pilot plant for production of 1 mw of solar photovoltaic panels by 1985 is being set up to undertake large scale demonstrations.

Photovoltaic panels can also be used to charge the batteries used in battery powered vehicles.

At present, the costs of solar photovoltaic pumpsets and battery powered vehicles are very much higher than conventional alternatives using petrol and diesel. Major efforts are being made to bring down costs and improve efficiency.

Additional heavy water plants

Q. Dr Lokesh Chandra, Dr (Mrs) Nazma Heptulla

Will the Prime Minister be pleased to state:

(a) whether it is a fact that seven additional heavy water plants are being set up to meet the requirements of the nuclear power programme; and

(b) what steps Government have taken to prevent the delays, breakdowns and malfunctioning which affect the heavy water production?

A. Minister of State for S & T, Electronics and Environment, Mr C. P. N. Singh

(a) It is proposed to set up three additional heavy water plants, two based on Ammonia-Hydrogen Exchange (monotherm) process and one based on Hydrogen Sulphide-Water exchange process, in the next phase, to meet the requirements of the nuclear power programme.

(b) Efforts are being made to optimise production at the existing Heavy Water Plants by improvements in the onstreaming procedure, and efficient operation and maintenance. The commissioning activities of the Heavy Water Plants, Kota and Talcher are being expedited to ensure early start up of production. In the light of the experience gained, execution of the new projects are proposed to be expedited. Further, the technical problems encountered in the earlier plants would be overcome by suitable measures.

Using of offshore gas for fertiliser production

Q. Mr Jagdish Tytler

Will the Minister of Petroleum, Chemicals and Fertilisers be pleased to state:

(a) whether it is a fact that the Government are thinking of using the offshore gas for fertiliser production;

(b) if so, whether Government propose to do to implement the recommendations of the Satish Chandra Committee on the utilisation of offshore gas?

A. Minister of Petroleum, Chemical & Fertilisers, Mr P. C. Sethi

(a) The present policy of the Government is that, as far as practicable, gas should be utilised as feedstock for the production of fertilisers, petrochemicals and for extraction of LPG, etc. To the extent the gas cannot be used immediately for these purposes it can be diverted for other purposes such as power generation, etc, purely as a fall-back arrangement on a temporary basis till the fertiliser and petrochemical plants are ready to utilise it fully.

(b) The recommendations have been accepted by the Government and are being implemented.

Import of iron and steel materials

Q. Mr Subodh Sen

Will the Minister of Steel and Mines be pleased to state:

(a) whether Government are planning to import 1.75 lakh tonnes of iron and steel materials during 1981-82;

(b) if so, what would be the price of that steel; and

(c) whether Government propose to allot the entire imported stock to the large scale and medium scale sector and that from domestic sources supplied to the State Small Industries Corporations?

A. Minister of Commerce, Steel and Mines, Mr Pranab Mukherjee

(a) The current import policy provides for import of some categories directly by actual users and some others are canalised. The quantities to be imported are likely to be substantially higher than 1.75 lakh tonnes.

(b) The price would depend on various factors like the category involved, the specification, the time of import, the source of import etc.

(c) No, Sir.

Export to the Soviet Union

Q. Mr Shiv Chandra Jha

Will the Minister of Commerce be pleased to state:

(a) whether it is a fact that the Soviet Union has made an agreement to buy toothpaste, etc, from India;

(b) if so, what are the details thereof?

A. Minister of State in the Ministry of Commerce, Mr Khurshid Alam Khan

(a) & (b): Yes, Sir, The Soviet Union has placed orders on a large number of Indian manufacturers and firms for supply of tooth-paste, cleaning powder, detergents and cosmetics like lipsticks, shaving cream, shampoos, mascara, nail polish etc for supply in 1981 and, in some cases beyond this year. It is understood, that exports of these items worth Rs 55 crores have already been made in 1981.

Indo-Ghana agreement for purchase of rough diamonds

Q. Mr Jagdish Tytler

Will the Minister of Steel and Mines be pleased to state:

(a) whether India and Ghana have entered into a bilateral agreement for the purchase of rough diamonds;

(b) if so, the details, the agreement along with the implications and profitability of the same?

A. Minister of Commerce, Steel and Mines, Mr Pranab Mukherjee

(a) & (b): A trade agreement has been negotiated between Ghana and India during the recent visit of an Indian delegation to that country. As a result of negotiations, Ghana has agreed to supply a certain quantity of rough diamonds directly on regular basis to the MMTC. Details of arrangements and supply are still to be finalised between MMTC and the Diamond Marketing Corporation of Ghana. It is, therefore, premature to asses the profitability of this arrangement.

Cochin as a free trade zone

Q. Prof P. J. Kurien

Will the Minister of Commerce be pleased to state:

(a) whether Government have received any representation to declare Cochin as a free trade zone; and

(b) if so, Government's reaction and the action taken so far?

A. Minister of State in the Ministry of Commerce, Mr Khurshid Alam Khan

(a) & (b): Yes Sir. A proposal had been received from the Government of Kerala to declare Cochin as a free trade zone. But in view of the decision taken by the Government of India in May, 1976 not to set up any more free trade zones in the country, such requests including that of Cochin for setting up free trade zones in the country have not been agreed to.

However, the Government of India have recently announced a 100 per cent export oriented scheme. Such units can be located anywhere in India and will be eligible for duty free imports of capital goods, raw material and component as in the case of units located in the free trade zones.

Debentures: Key to innovative resource mobilisation

Concluded from page 465

that surface the general market valuations. The paid up capital, represented by equity and preference shares (with the exclusion of common shares) of the companies covered by the study amounted to Rs 2,970 crores as at the end of December 1979 while the funds raised through debentures totalled Rs 504 crores, which works out to 17 per cent of the paid-up capital.

With the emergence of debentures as a growing corporate tool for resource mobilisation, there is an urgent need to make this sort of public borrowing more beneficial and result-bearing both for the issuing companies and the banks and the small investors. Though there has been considerable public interest in subscribing to debentures, investors cannot be expected to opt for debentures when there are other modes of profitable investment.

The absence of a secondary market for encashing the debentures prevents many prospective investors from entering into the field of debentures. Again, the differential rates of stamp duties for transfer of debentures unlike for shares is also a minus factor. The success of the new issues of some of the companies is largely due to innovative resource management and clever efforts in identifying areas of investment potential hitherto untapped by those companies.

Secondary market

Secondary market for debentures could not develop due to low return consequent to ceiling on the interest rates which is kept unduly low. Therefore, debentures cannot even be considered more liquid than fixed deposits with commercial banks as the depositor is entitled for borrowing against such deposits by paying a premium of 2 per cent interest. Provision for repurchase by company of debentures upto the full value of Rs 25 lakhs in any accounting year at par value provided total holding of a debenture holder do not exceed Rs 10,000 and the debentures have been held for at least one year, offers part offsetting advantage to this situation. Therefore, the need is to make debentures more attractive by removing the current ceiling on debentures or raising it upwards. Moreover, there appears little justification for keeping a ceiling rate lower than interest available on company deposits or on deposits with commercial banks.

The argument put forward in support of ceiling on debenture interest rates lack force. For example it is argued that the ceiling keeps cost of capital low for long-term investment, but the ceiling denies scope for long-term funds that can be mobilised and thus defeats the very objective of encouraging long-term investment. It is unconvincing that ceiling is necessary to prevent companies from evading RBI credit curbs by using other means of finance as banks can take care of long-term borrowings through public issues. Ceiling is advocated as a means to protect the market for government securities which is again unconvincing as government securities always have a captive market.

Protection of equity market

It is said that ceiling is aimed at protection for the equity market as higher yields on debentures will necessitate higher payment on equities also. But, it cannot be denied that this will serve as a stimulant for the investors and to that extent debentures can emerge as a substitute for short-term borrowing from commercial banks. Raising the ceiling interest rate on debentures, thus, not only will attract public investments but also give a leverage in the hands of RBI to control credit.

Banks, of late, have demonstrated considerable interest in sophisticated means of corporate activities and associated themselves in issue management and allied matters. These institutions have a special role in contributing towards the success of new issues, both convertible and non-convertible, as it will reduce considerably the exclusive dependence of companies on institutional finance. A number of banks are underwriting the issues of non-convertible debentures. Banks, however, cannot block their funds in debentures for a long time, though handling of such issues, places with them a significant amount of funds of a floating nature. The provision of a secondary market, therefore, becomes necessary to enable the banks to convert the debentures into liquid money. Once liquidity is established, the investors will find medium of debentures more rewarding.

Urgent need for Ombudsman

By ARVIND BHANDARI

SINCE the name of Mr Antulay has been reverberating in the chambers of Parliament and embellishing the front pages of newspapers. I can scarcely avoid the reflex action to join the cacophony. For the moment, Mrs Gandhi has been constrained to demonstrate her trust in Mr Antulay despite his trusts, partly because of her inability to completely live down her initial association with the questionable conundrum, partly because of the cynical notion that the party's lustrous image would be dimmed if a hand-picked protege were not to be defended. But, in a sense, Mr Antulay deserves our gratitude because, through his charade of a latter-day Robinhood, he has helped to revive interest in two vital issues. Firstly, excessive controls and over-regulation, foisted on the country in the name of welfarism and distributive justice, have more than a socio-economic angle. It has been the stand of most observers of the economic scene that multiplicity of controls also has a political angle inasmuch as it places in the hands of the politicians in power immense patronage, which can be dispensed for a price, the yield going sometimes into party coffers and sometimes elsewhere. Now Mr Antulay has vindicated this stand, if such a stand ever needed vindication. Axiomatically the apparatus of excessive controls is unlikely to be dismantled because of the vested interest of ruling politicians. Secondly, Mr Antulay has brought to the surface what many of his colleagues seek to keep subtarranean by doing overtly what they seek to do covertly. By a brazen, bare-faced assault on standards of public probity Mr Antulay has again brought to the fore the urgent need to immediately establish an Ombudsman-type institution both at the Centre and in the states which would be completely independent of the executive. A *Lok Pal* at the Centre should be empowered to investigate charges of corruption and abuse of power right from the office of the Prime Minister downwards. A *Lok Ayukt* in the states should have similar powers in respect of the office of the Chief Minister downwards. Some states, including Maharashtra, have had a *Lok Ayukt*, but it has been an impotent institution because of exclusion of the office of Chief Minister from its purview and lack of an independent investigative machinery. It is a measure of the potential effectiveness of the *Lok Pal* institution that none of those who have wielded power in New Delhi have had the guts to establish it, with the result that the proposed legislation on the subject has been rotting for a number of years. Mrs Gandhi first introduced a *Lok Pal* in Parliament during her earlier regime. Mr Morarji Desai improved on the bill by also bringing within its purview the office of Prime Minister, but when it came to the crunch, the Janata Government funked. During her present regime Mrs Gandhi has been so tied up with making her government work that she has apparently no time to even contemplate reformist measures. If Mrs Gandhi even now brings in a *Lok Pal*, she will have won the appreciation of a public whose nostrils are beginning to be unbearably assailed by the stink emanating from the corridors of power. An ounce of practice is equal to at least a tonne of precept.

DATELINE NEW DELHI

Counter-productive

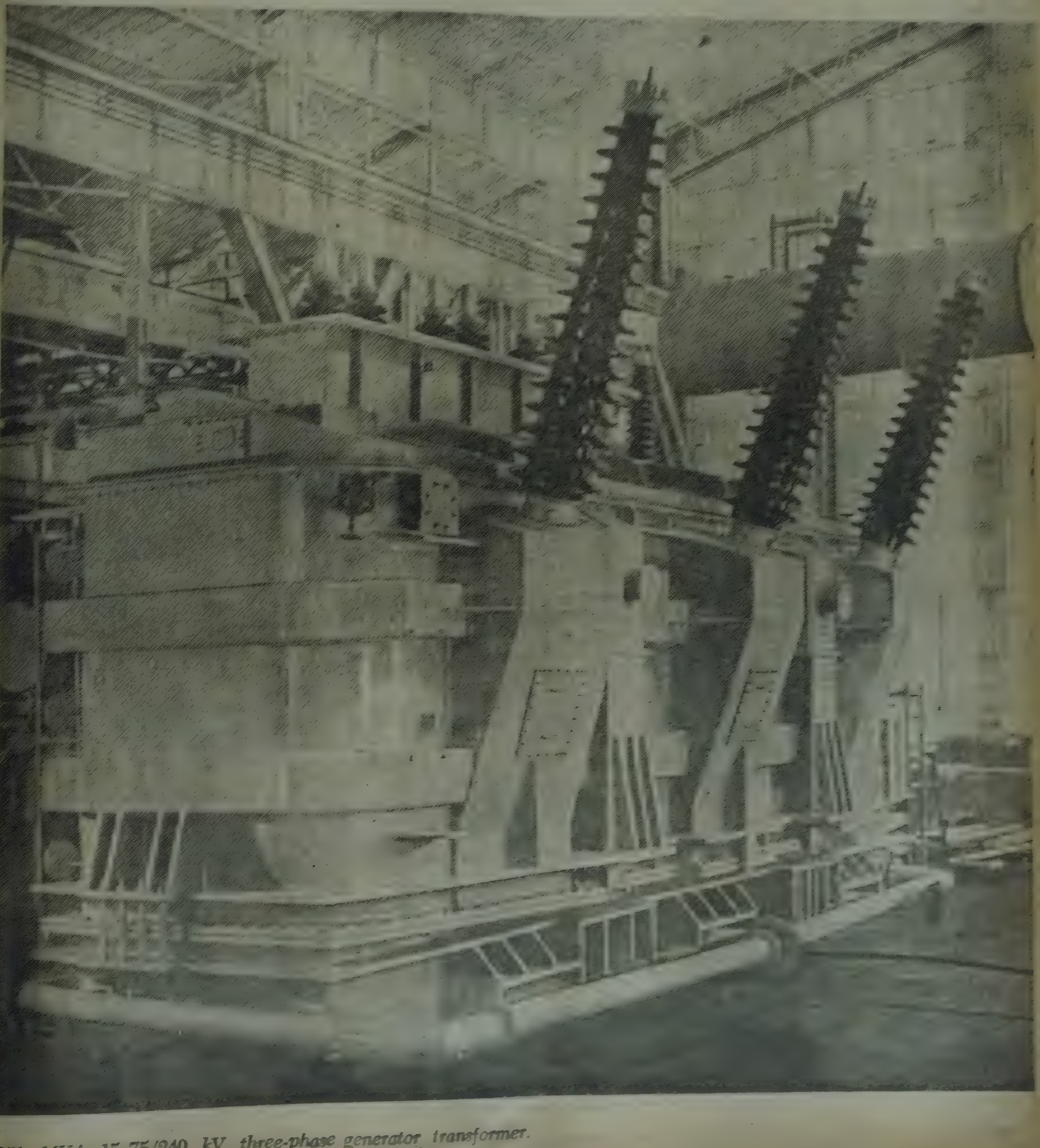
Talking about controls, some of the restrictions placed on the larger houses are plainly counter-productive. One, large houses are not allowed to set up units in the core sector without MRTP clearance, which is such a cumbersome procedure that it acts as an obstacle. In fact, Appendix I of the Industrial Development and Regulation Act restricts the number of industries which large houses can enter to 19. Two, Section 72-A of the Income Tax Act prohibits merger of a sick unit with a healthy unit unless the two are engaged in similar manufacturing activity. Three, MRTP units have to seek prior permission for modernisation if such a proposal results in accretion to value of assets by 25 per cent (the Sachar Committee had suggested relaxation of this provision). Four, FERA companies are discouraged to enter the core sector even when they have diluted their equity to 40 per cent non-resident holding. If the Government does not have the gumption to remove these controls, it should at least relax them. Will it? While sources in the Industry Ministry hint that there is some thinking along these lines, Mrs Gandhi was reported to have told a delegation of young industrialists that controls were necessary in the Indian context (*The Times of India*, September 2). The Prime Minister's remarks may not be taken as a douche of cold water on hopes that this country would still move towards economic pragmatism but they are definitely indicative of a constipated approach when it comes to throwing off the shackles of shibboleths.

More to it

The Thal Vaishet affair would be a typical candidate for being referred by a public-spirited citizen to the *Lok Pal* if one existed. Because of the Government's decision to make a last-minute switch from the selected American consultants, C. F. Braun, to the Danish-Italian consultants, Haldor Topsoe, India has lost a World Bank loan of $ 250 million for what is planned to be one of the biggest urea plants in the world. I have argued earlier also in these columns that the whole deal will continue to appear shady unless the Government chooses to dispel the shade by throwing some light on it. The Government should publish a white paper which would explain in detail why the selected consultants were suddenly changed when the selection had been endorsed not only by the World Bank but also by two separate Indian committees of experts. Such a white paper is all the more called for in view of some revelations in the report view of the Public Undertakings Committee which has been tabled in Parliament. The report says: "The Committee asked (the Secretary, Department of Chemicals and Fertilisers) how the offer of Haldor Topsoe was found to be 'comprehensive and attractive' and whether the committee of Ministers had the advantage of any superior technical advice. All that the witness could say was: 'I can't say superior technical advice; they have gone into what I may say weighty non-technical reasons...' The Cabinet decision merely accepts the recommendation of the committee of Ministers". What are these "weighty non-technical reasons" which weighed with this Government? The people have a right to know."

Progress of electrical industry

—A FEATURE



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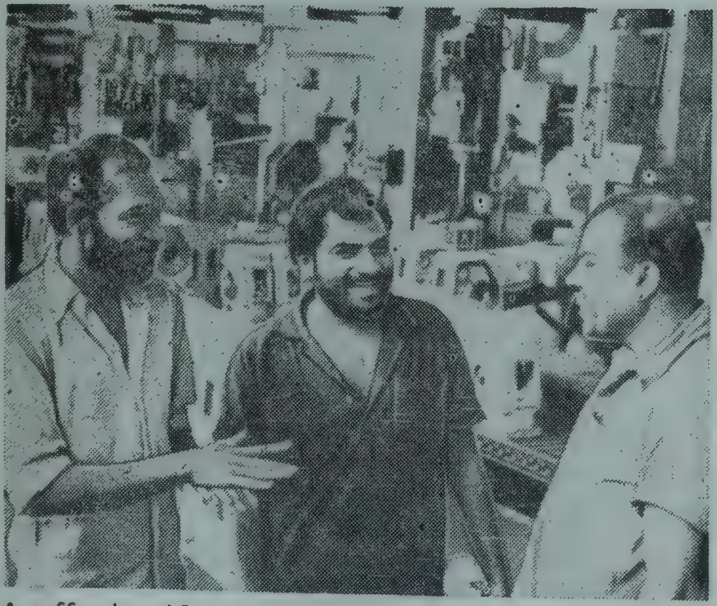

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PRATIBHA-81-220

Electrical industry : Three decades of progress

By AJIT SHAH

ENERGY plays a vital role in accelerating human progress and economic development. For human progress much depends upon the capacity of the human being to discover and harness the energy available in nature. Among the different forms of energy, electricity has emerged as the most convenient and preferred form. It has become a daily necessity for a common man for satisfying his common needs of water supply, transport, communication and lighting. It has made his life comfortable through technological and scientific innovations so much so, that now the consumption of electricity is regarded as the index of economic well-being. The per capita consumption of energy is highest in the USA (11,554 kg) and in India, it is only 218 kg. The per capita consumption of electricity in India in 1978-79 was 154 kwh.

The electrical industry has also helped the Government in its ambitious power development programme in the country.

The Indian electrical industry has made a good progress in the post-independence period. The progress would have been phenomenal if the power requirements of the electrical industry were met. The industry has been facing power shortages continuously for the last five years. The overall power requirement of the country during 1979-80 was 3861.13 GWH but actual supply was only 3271.34 GWH. The shortage of 589.79 GWH was highest during the last five years. The Sixth Five Year Plan estimates that the installed capacity of power generation by 1982-83 would be 44.6 MKW. Unless this capacity is installed, electricity generated and put into productive uses, it is feared that the progress of the electrical industry and entire economy as such will be retarded.

Today, the industry meets almost all the requirements of the country in the field of heavy electrical, industrial, domestic and agricultural equipment. These include generators, turbines, power transformers, motors, pumps, cables and wires, motor starters, welding equipment, LT/HT circuit breakers, transmission equipment, capacitors, condensors, fans, radio receivers, TV sets, lamps, refrigerators, air conditioners as well as many household electrical appliances. Owing to limited time at our disposal for discussions, we will restrict ourselves to household electrical goods.

Household electrical goods

In India, household electrical goods include fans, lamps, bulbs, refrigerators, air conditioners, as well as different electrical appliances.

Lamps and tubes: The history of lamp manufacturing dates back to 1932 when the first factory manufacturing GLS lamps was set up in Calcutta. The second unit was set up in 1936 in Bangalore. It was in the year 1952 that the production of fluorescent tubes, auto and miniature bulbs started in India.

Today, we have 14 units in the organised sector and a few in the small scale sector manufacturing GLS lamps. The units in the organised sector making fluorescent tubes and miniature lamps are 9 and 10 respectively. While no exact figures are available, it is estimated that the total investment in the organised and small scale sector is estimated to be over Rs 50 crores whereas total employment provided by this sector is approximately 15,000.

With the spectacular growth of the lamp industry during the last 50 years, the ancillary industries producing lamp components and other requirements are rapidly developed and today, there are more than 80 units manufacturing items like filament coils, molybdenum wires, lead-in-wires, glass shells and glass tubes, lamp caps, gases and dumet.

The production of GLS lamps which was 8.11 million pieces in 1946, rose to 182.77 million pieces in 1978 — registering compound annual growth rate of 10.3 per cent. The production of fluorescent tubes was 70,000 pieces in 1952 and 21.37 million pieces in 1978. The annual growth rate of the industry was 24.6 per cent, which is quite impressive. The auto, miniature and other lamps industry also grew well during the last 27 years. The production of such lamps was 14,000 pieces in 1952, which rose to 40 million pieces in 1978 thereby achieving annual compound growth rate of 24.3 per cent.

The Indian lamps and tubes which meet the world standard, are now becoming increasingly popular in foreign countries. During the last decade, the export earnings of the industry has grown up from Rs 39 lakhs in 1971-72 to Rs 500 lakhs during 1980-81. The international market for the products is good and is characterised by low prices. To compete and capture the international market, it is essential to sell bulbs at low prices. This needs certain backing and incentives from the Government. A more pragmatic approach in the field of raw materials availability, excise duty and licencing policy would go a long way in getting an increased share of the foreign market and expanding the domestic market.

The lamp industry is most self-sufficient. Most of the components and raw materials that it needs are produced indigenously. Now, tungsten filaments are also being manufactured in the country. Sometimes, tungsten filaments, glass shells and lamp caps are imported in order to meet the shortage and keep the production continuous.

With emphasis on rural electrification programmes, the demand for GLS lamps and fluorescent tubes will go up. The draft Sixth Five Year Plan envisages demand for GL lamps and tubes to be 365 million and 38 million pieces respectively per year by 1983-84.

Fans : Fan is a necessity rather than a luxury in a tropical country like India. The fan industry in the organised small scale sector made rapid strides in recent years in terms of quality and variety. The first fan industry was set up in 1912 in Calcutta by India Electric Works Ltd. The fan industry could not achieve much progress befor independence; in fact, the Second World War impaired the capacity and obstructed the growth. With the advent of independence and the era of planning, the fan industry got a fillip and new entrepreneurs were encouraged to set up fan units. The result was obvious. The production of fans rose to 10 lakh pieces in 1960 from two lakh pieces in 1950.

The progress of the industry since 1960 has been characterised by technological improvements. The industry is paying considerable attention to research and development and has adapted new manufacturing techniques and substitution of raw materials, etc. This has turned out sophisticated fans. The industry has made full use of development of plastic and aluminium industries. The industry is now in a position to produce press-brake blades for more air delivery and greater air spread. All such developments and technological improvements have enabled the industry make its presence felt in

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Mr Shah is General Manager, Bajaj Electricals Ltd, Bombay.

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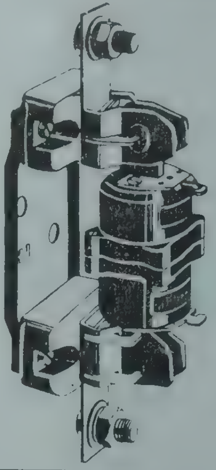

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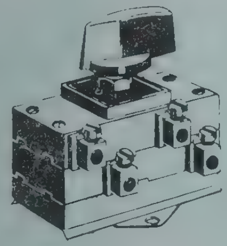
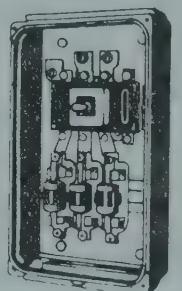
From 63 amps. upto 630 amps.

- Fast and slow acting types
- Breaking capacity 100,000 amps
- Low cut off currents
- Conforms to IS:2208

DUCO SWITCH

- Available in 32A & 63A
- Panel mounting - front operated
- On-load heavy duty Rotary Switch
- Having Moulded Case & Compact Construction
- Available in Cast iron or sheet steel enclosure
- Conforms to IS: 4047





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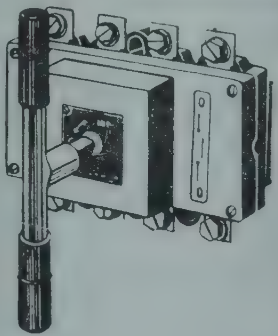
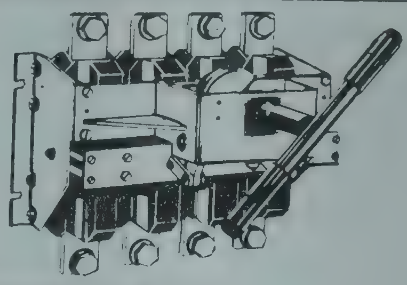
- Available from 100A to 630A
- Panel mounting - front operation
- Onload heavy duty switch
- Having Moulded Case & Compact Construction
- Quick make, quick break design.
- Available in Cast iron or sheet steel enclosure
- Conforms to IS:4047





PAMECO SWITCH

- Available from 1000A to 3200A
- Quick make, quick break mechanism
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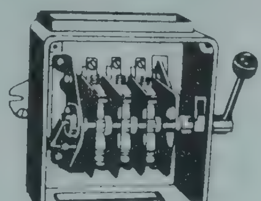

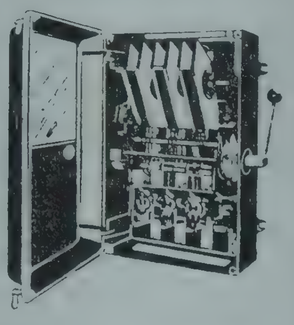

AIR CIRCUIT BREAKER

- From 200 Amps. to 1200 Amps.
- Quick make, Quick break trip free design
- Side or front operation
- Adjustable overload and electromagnetic short circuit Releases

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domestic as well as foreign markets.

Today, there are about 300 units in the country manufacturing fans. Of these 300 units, 15 are in the organised sector. Around 5.5 million fans are produced in the country today. The Sixth Five Year Plan estimates a target capacity of 8 million fans for the year 1982-83. The industry today provides direct employment to about 15,000 persons. In addition, about 25,000 persons are enabled to earn their bread through its ancillaries and suppliers. The industry purchases about 59 per cent of its components requirements from the small scale sector.

The industry has also made strides in foreign markets. In 1970-71, it exported fans worth Rs 139.05 lakhs which rose to Rs 1,198.30 lakhs in 1979-80. However, Indian manufacturers are now facing steep competition from manufacturers in Hong Kong and Taiwan in the traditional markets of the Middle East and South-East Africa. Besides exporting fans, India also has exported know-how for manufacturing fans to Sri Lanka, Nigeria and Iraq.

Constraints : The industry faces various constraints. The main constraint is shortages of raw materials like silicon sheets, EC grade aluminium injects, aluminium sheets, pig iron, steel sheets and super enamelled copper wires, etc. Added to this, the power shortage prevailing all over the country has crippled the industry. Besides, imports of bearings have totally been banned. It is feared that the indigenous bearing manufacturers may not be in a position to meet the entire demand of the fan industry which requires quality bearings. Government should adopt pragmatic policies regarding distribution of raw materials and control of prices. In addition, the industry should try to adopt new production techniques so that the consumer will get a fan at reasonable price.

Refrigerators & air conditioners : The foundation of refrigeration and air-conditioning industry was laid in 1958 in our country. Since then, the industry has made remarkable progress. The industry started manufacturing compressors for refrigerators air conditioners and water coolers in 1968. Prior to that, most of the units were assembly units for various makes of imported compressors.

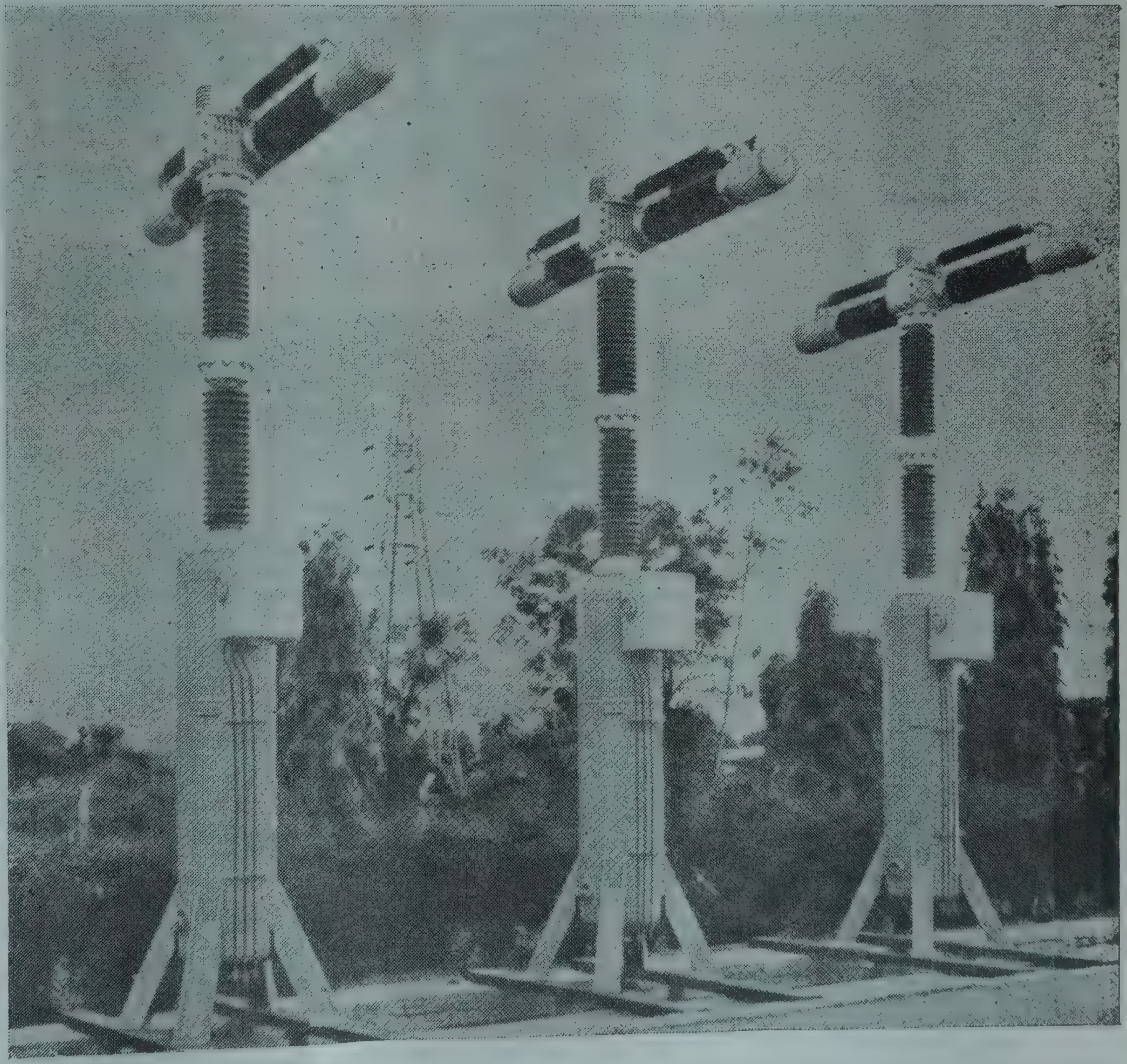
Today, there are six units in the organised sector with a total capacity of 3.39 lakhs refrigerators. The industry produced 11,388 refrigerators in 1960, which rose substantially to 1.77 lakhs registering 16.5 per cent compound annual growth rate. The capacity utilisation of the industry fluctuates randomly. From 1963 to 1970, the utilisation was between 120 to 181 per cent. However, after 1971, the capacity utilisation started declining. In 1978 it was only 48.7 per cent.

In spite of constraints on growth of refrigeration industry, the export of refrigerators has steadily gone up from Rs 47,000 in 1967-68 to **Rs 1.07** crores in 1977-78. Besides, the know-how is also exported. The food freezing plants and airconditioned textile mills have been installed in Greece, Cyprus, Sri Lanka, Thailand, Malaysia, Libya, Australia and Iran. Many developing countries are making increasing demand on the services of Indian engineers to instal and operate air-conditioning and refrigeration plants.

Air-conditioning : Today, there are seven units in the organised sector manufacturing air-conditioners in the country. The total installed capacity is 44,700 pieces. The industry produced 10,716 air conditioners in 1960 whereas in 1978 it turned out 21,359 air conditioners. The capacity utilisation of the industry has fluctuated widely during last 20 years from 34 per cent to 108 per cent.

In 1967-68, 15 air conditioners were exported fetching Rs 41,000. The export was highest during 1975-76 when over 1,500 air conditioners were exported at Rs 42 lakhs.

Constraints : The air conditioning and refrigeration industry has a vital role in the economic growth of the country. Eighty per cent of its products are used for industrial applications and food preservation. Besides, some of the important sectors of the industry which need the products of this industry are precision manufacturing industries, heavy construction industry, drugs and pharmaceuticals, textiles, telephone exchanges and broadcasting studios, research and testing laboratories, nuclear, hydel and thermal power stations, chemicals and petrochemicals, hospitals, hotels, defence



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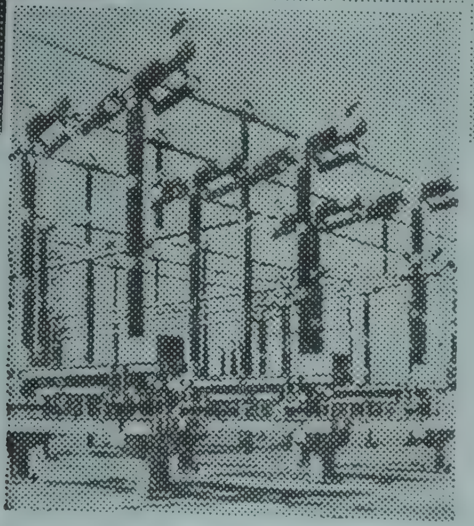

NGEF THANKS KPC & MSEB

NGEF does it again—introducing **high performance SF6 Circuit Breakers** from 66 kV to 400 kV and upto 50 kA.

NGEF's collaborators, AEG-TELEFUNKEN are the first in the world to offer SF6 as arc-quenching medium (Patent dated 6.9.1938). The SF6 Circuit Breakers, which NGEF has introduced in India, have many distinct features which make them the most reliable and compact Circuit Breakers.

Here are a few unique features:

Puffer-type SF6 Circuit Breaker
For insulation: Low SF6 pressure. For arc-quenching: Generation of high pressure in an insulating nozzle by compression. Hence, trouble-free indoors or outdoors. No heating of SF6 gas necessary even at low temperatures.

High Breaking Capacity
The arc itself controls the blast intensity. High short-circuit currents—high quenching power.

Small Switching Overvoltages
Low inductive currents are gently handled. Overvoltage factors are extremely small. Pre-insertion resistors available for higher voltages.

No Re-striking On Breaking
Gas pressure, nozzle arrangement and moving contact speed matched such that capacitive currents are reliably interrupted without re-strike.

High Operational Reliability
All gas compartments sealed by power gaskets. SF6 gas cannot escape, nor moisture can enter.

Low Breaker Maintenance
Simple erection, few moving parts. Long intervals between inspection.

Pneumatic Drive
Combines the advantages of SF6 technology with the benefits of pneumatics. Makes the circuit breakers much simpler. Lower pressure which is less than 1/10th of hydraulic drive. Compressed air system easy to instal.

The Karnataka Power Corporation (KPC) has already placed order for nine 220 kV SF6 Circuit Breakers for Raichur Thermal Station and the Maharashtra State Electricity Board (MSEB) for five 400 kV SF6 Circuit Breakers.

NGEF thanks both KPC and MSEB for the confidence reposed.

Customer confidence and preference were proved when the National Thermal Power Corporation awarded to NGEF's collaborators, AEG-TELEFUNKEN, against global tenders, the contract for the supply of 27 numbers of 400 kV SF6 Circuit Breakers for seven substations including super thermal power stations at Ramagundam and Singrauli.

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services, etc. Today, the industry is in a position to meet the country's requirements for industrial applications. It has achieved self-sufficiency and a degree of sophistication that matches standards prevailing in any part of the world. The industry provides employment to more than 70,000 persons.

The industry currently bears a heavy burden of taxation. This burden, as per MCEAR, has proved to be counter-productive. The progress of the industry is hampered owing to successive heavy doses of taxation which rose from 20 per cent in 1961 to 125 per cent in 1979-80. The excise duty on refrigerators is as high as 40 per cent to 110 per cent. This means that in 286-litre refrigerators the tax element as percentage of current price exclusive of tax on inputs is as high as 135 per cent and on 165-litre, the tax element is 90 per cent. In one-tonne air conditioner the tax element as percentage of price exclusive of tax on inputs is as high as 200 per cent.

The industry is no longer a luxury but is an essential one to economic growth. The industry is taxed considering it to be a luxury. The taxation measures should stimulate the production and not inhibit it. There should be proper co-ordination between taxation authority and licensing authority. The DGTD has estimated the demand for refrigerators and air conditioners at 4 lakhs and 48,000 pieces respectively. But the actual production was only 1.40 lakhs and 20,000 only. The industry in future will grow only if rational steps towards taxation are taken by the Government in respect of the industry.

Electric motors

The Indian electrical motors industry is well established in the country. The industry has developed technical know-how with which it produces motors of different ranges and of diverse uses.

Today, there are 35 units in the organised sector and about 250 in small scale sector with an installed capacity of 6 million kw per annum. Additional capacity of 2.76 lakh kw has been approved through letters of indent thus making total approved capacity of 5.2 million kw in the organised sector. The electric motors from 1 hp to 10 hp — AC except special type and FHP motors AC – excluding special type have been reserved for the exclusive development in the small scale sector. The manufacturers in the small scale industries sector make general purpose motors upto 20 hp. The units in the organised sector produce motors with a capacity upto 450 hp and the units in the public sector make motors upto 1,000 hp using advanced insulation system.

The production of electric motors in 1977 was 2.98 million kw which rose to 3.02 million kw during 1978 thus registering a modest growth of 1.3 per cent.

1979 experienced a shortfall in the production when the industry could produce only 2.83 million kw. This fall in production (6.29 per cent over previous year) is largely owing to the fact that one of the units in the organised sector ceased to produce motors in 1979.

The demand for electric motors is linked with development of power generation capacity. The task force of Planning Commissioner has estimated the demand for various type of electric motors at 6 million kw by 1982-83. It is estimated that the demand at the end of 1989 would be 8.9 million kw.

Imports of motors are restricted to specialised types such as flame-proof motors and variable speed motors which indigenous manufacturers are not able to manufacture because of their design or delivery considerations. The import of motors in 1978-79 was Rs 7.4 crores. As against this, export earnings during 1976-77 was Rs 1.62 crores and in 1977-78 Rs 2.10 crores.

The industry faces certain problems in the field of raw materials. The raw materials like stampings for starters and rotors, enamelled copper wires, copper bars, insulation materials etc are not being produced indigenously but are imported. The another difficult situation the industry faces is that on the one hand the prices of raw materials have gone up but on the other the industry has tariff restriction owing to which the industry cannot increase the prices of motors.

Transformers

At present there are 33 units in the organised sector making power and distribution transformers. Besides, in small scale sector there are a large number of manufacturers making distribution transformers of lower ratings.

The licensed capacity in the organised sector is 28.05 million kva per annum and installed capacity of 27.05 million kva. In addition, letters of intent covering a capacity of 5.096 million kva has been issued making total licensed capacity of about 33 million kva.

The production of distribution and power transformers together has been growing at the rate of 8.9 per cent per annum (compound) during last decade. The combined production in 1979-80 was 23..506 kva thus making 86.9 per cent use of installed capacity.

The Task Force of the Planning Commission has estimated the demand for transformers to be 30 million kva per year by 1982-83. Keeping in view the demand and capacity approved, the additional demand could well be met by expansion and upgradation of existing units.

The imports of transformers are marginal. The foreign exchange earnings from transformers during 1975-76 was Rs 4.28 crores which moved up to Rs 4.82 crores in 1976-77.

The industry is mostly self-sufficient in production. Most of the production machinery, by and large, are available indigenously. Only for higher rating transformers, special type of testing equipment are imported. Besides, main raw materials like CRGO steel, special insulating materials, and copper for winding wires required for transformers are still imported.

Pumps

The Indian pump industry started its operations in the early 20's when three pump units were set-up in India. Prior to this, even hand pumps were imported. Since then, during the last 60 years the pump industry has made a good progress in terms of quantity, quality and technology.

The industry makes the pumps which could be used in the fields like agriculture, irrigation, construction industry, mines, refineries, chemical manufacture, process steel plants, power generation, sugar, paper, dry docks, shipping, etc. The various types of pumps manufactured in the country are centrifugal pumps, multi-stage, radial and mixed flow, non-clog, split-case, self priming, axial flow, verticle turbine, submersible, rotary, reciprocating, diaphragm, gear, and mono-block pumps.

At present, there are 46 manufacturers of pumps in the organised sector and over 400 manufacturers in small and medium sector. The industry today produces annually seven lakh pumps. The production in the organised sector was 2.88 lakh pumps, which rose to 3.70 lakhs in 1980 registering annual compound growth rate of 6.5 per cent. The industry also made a reasonably good progress in making process pumps. During 1978-79 the production of such process pumps reached to 5,000 numbers valued at Rs 11.50 crores.

Indian pumps have made a steady in-roads into the overseas market. Currently, more than 20 manufacturers are regularly exporting pumps to more than 65 countries of the Middle-East, Far East, Africa, Europe, Australia, New Zealand, etc. The export in 1975-76 was Rs 64.5 million which rose to Rs 84.5 million in 1978-79 registering annual compound growth rate of 9.4 per cent. The industry not only exports the pumps but also the technology to developing countries. The joint venture projects are set-up in Malaysia, Sri Lanka, and Mauritius, to manufacture pumps. The process pumps for certain appli-

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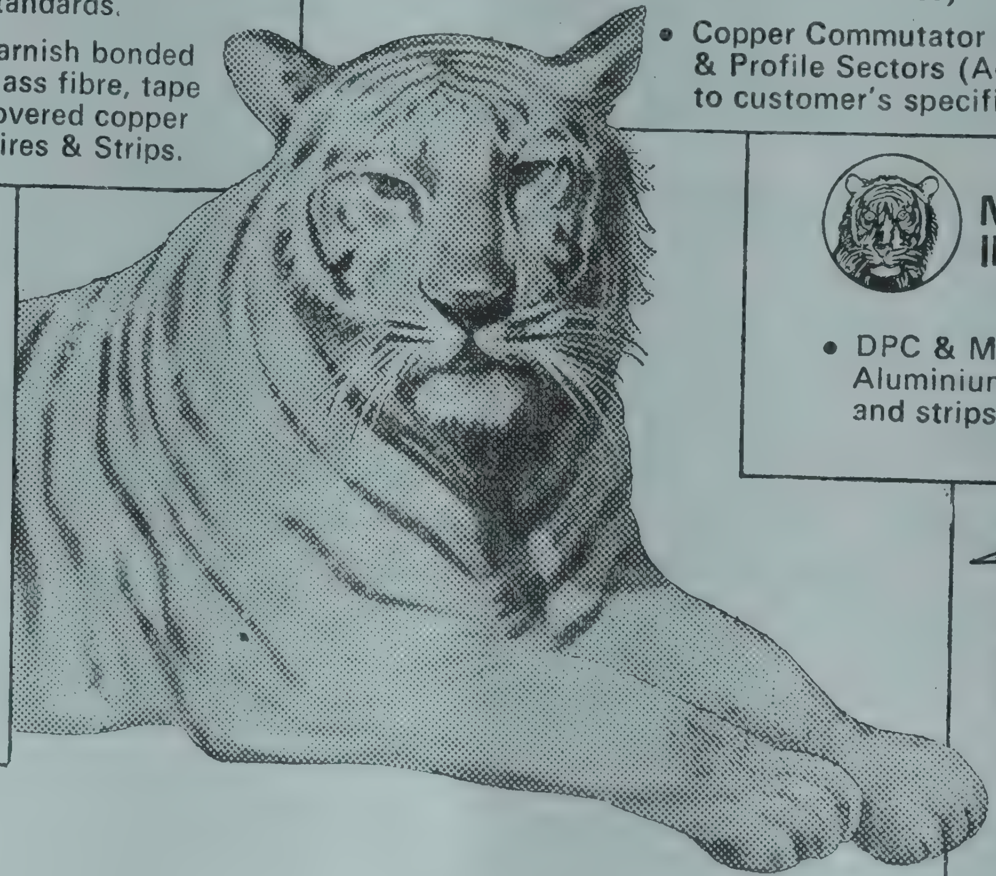

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cations are also imported along with complete process plants. The import of such pumps was Rs 15.8 million which steadily rose to Rs 60.9 million in 1976-77.

The total capital investment in the pump industry is to the tune of Rs 300 million. The industry provides employment to about 20,000 persons.

The Sixth Plan working group has projected the production requirements for all types of pumps at Rs 82 crores by 1983-84.

Appliances

Compared to fan, lamp, tubes, refrigerator and air conditioners household electrical appliances industry is of recent origin. But the progress it has made during last 15 years is full of promise for a bright future. Knowing the role the industry can play, the Government has rightly thought of imaginative policy of reserving the products for small scale industries. This, of course, has paid dividends. Today, there are more than 600 small-scale units all over the country producing wide range of appliances worth Rs 20 crores.

At present, the industry produces indigenously, washing machines, hair dryers, saucepans, kettles, mixers, ovens, cooking ranges, water heaters, geysers, hot plates, room-heaters, electrical irons and toasters, etc. Most of these appliances are a boon to the housewife who can save time and energy.

The industry is in the small-scale sector and therefore, has its inherent problems, such as economies of scale. This adversely affects the cost of production, quality and finish of the products. The industry, therefore has to face severe competition from imported goods which are superior in appearance, finish, quality, etc. Second there is a bias in the developing countries like ours for such foreign appliances. The industry, therefore. has to produce quality appliances and force the foreign appliances out of consumers mind.

Besides, the strong bias for foreign appliances, the industry has limited finance which does not permit it to carry on production on a large scale. In addition, fluctuating prices and availability of raw materials and persistent power shortages have crippled the growth of the industry. It also lacks basic research and development facilities. There is also a lack of quality consciousness and finish on the part of the entrepreneurs. Added to this, the ever increasing taxes and excise duties which have forced up their prices and tended to place them beyond the reach of the common man.

Since, the entrepreneur in the small scale sector has to manage all the fronts of the unit *viz*, production, purchase of raw materials, quality control, marketing, Government formalities, etc, he cannot pay adequate attention to marketing of his products. In spite of these various constraints, the industry has a better future.

Knowing well the limitations of the entrepreneurs and the market for electrical appliances, some of the leading marketing organisations are playing a very vital role in development of the industry. In fact, the industry has attained its present status largely owing to the vast and varied assistance given by these organisations. They provide technical expertise, financial assistance and to some extent research and development facilities. They have helped to standardise the specifications and manufacturing by creating quality control facilities. Due to the vast distribution network that they have at their disposal they have been able to create demand for these products country wide. Besides, they provide prompt after-sales-service which gives the consumer his money's worth. These marketing organisations can play a better role in promoting the industry but factors like unorganised sector, lack of reliable data on production, demand and sales potential, varying tax structure, etc, are limiting the role of the organisations.

Any household electrical appliances has an element of hazard. It is handled by a layman. Every appliance has to be designed and produced very carefully else it will lead to serious consequences. The spurious and substandard goods therefore have to be checked effectively. The Government authorities alone cannot do it. The consumers will have to co-operate with Government in spotting such spurious goods. The Consumer Guidance Society and several other social organisations are active in this field and have trained the consumers in use and purchase of electrical goods. The Bajaj Electricals Limited organises consumer meets where consumers give their frank and fearless opinion about the products the organisation markets. The consumers are also encouraged to give suggestions for improvement in the products. The first three best suggestions are rewarded suitably. The suitable suggestions are incorporated wherever necessary.

The per capita expenditure on electrical appliances is also regarded as an economic indicator. Today, in urban India per capita expenditure on electrical appliances is only Rs 3. In West Germany 9 out of 10 families have refrigerators, 8 out of 10 have washing machine, 7 out of 10 have cooking ranges and 6 out of 10 use electric water heaters. There lies vast potential for such time and labour saving, electrical appliances and with increasing emphasis on rural electrification some of these appliances will also be demanded by rural housewives. This vast and potential market can be tapped with a pragmatic approach to the problems of the industry on the part of manufacturers, marketing organisations and Government authorities.

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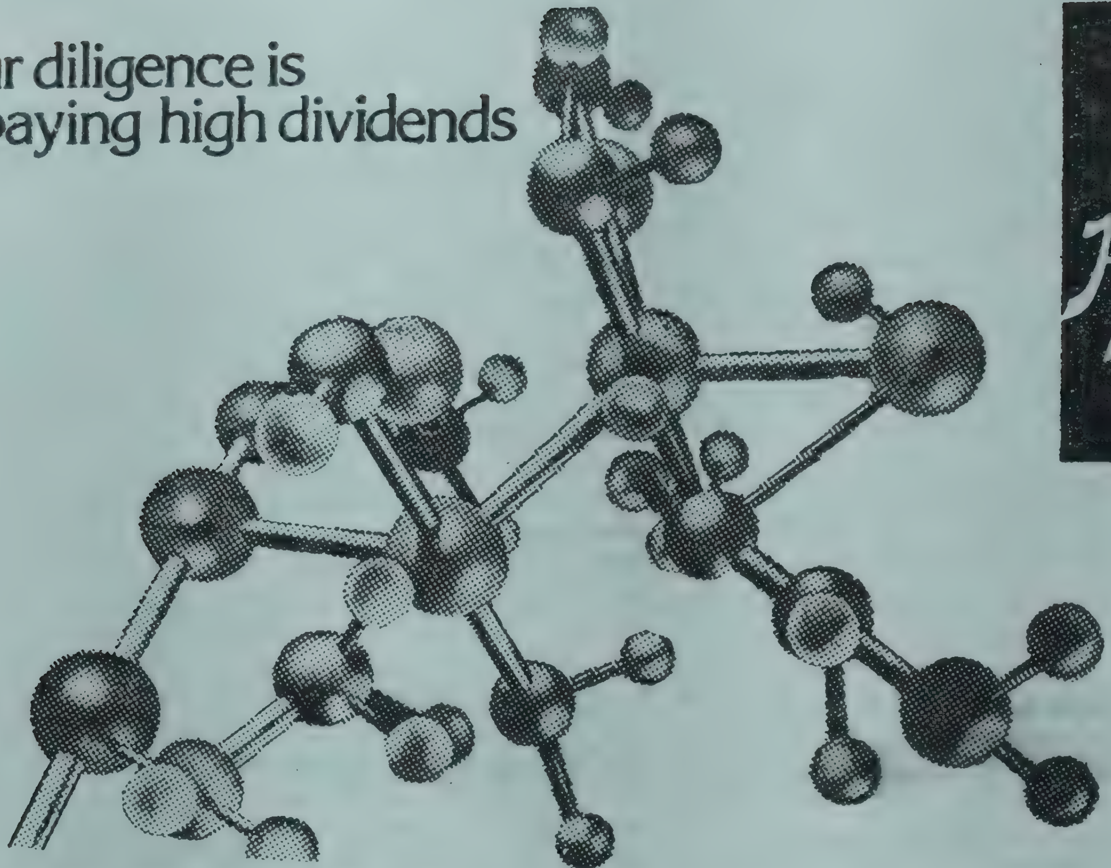

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Planning for power sector

By A. K. KHOSLA

THE growth of the power development programme requires analysis of the mode of the power generation mix *i.e.* thermal, hydro and nuclear. With the depleting natural resources, stress has come on renewable resources like hydro stations. The mix of thermal, hydro and nuclear would have to be based on load pattern with the base load being met by thermal and nuclear stations while utilisation of hydro stations should be based on water inflow pattern and peak demand needs. Rating of sets especially thermal and nuclear needs to be determined keeping in view size of a system and to avoid multiplication of sizes. The country has gone in progressively for installation of larger thermal sets and is poised on the introduction of 500 mw set, to meet the projected demand but with this growth in size of the generating sets, it is equally important to study its implication from the point of view of reliability, operation and maintenance on the design of power station system as a whole.

So far, hydro is the only renewable resource, which has been commercially exploited. Lot of hydro potential is still left for exploitation for electric power generation. Better management techniques are being considered to improve project management of hydro stations to reduce gestation period.

For best utilisation of power generation equipment, and for overall efficiency purposes, thermal and nuclear stations need to operate at a continuous high load factor. The peak load demand is normally taken care of by the hydro stations wherever possible. It has been found economical in some cases to store water after it has generated power and to pump it back to the original reservoir using power from the grid during lean demand period *e.g.* at night. The pumped water can be used to generate power again during peak demand period. Only one such scheme has been commissioned in India so far at Nagarjunasagar. We would need to consider more such schemes.

Excerpts from Mr Khosla's recent presidential address at the annual general meeting of the Institution of Engineers, New Delhi as published in Urja.

Consideration can be given to the installation of very small hydro sets of capacity around 1 to 2 mw in rivers/canals to meet small loads, particularly in the rural areas.

Thermal power stations

In our present context, because of shorter construction time for thermal power stations, stress would continue to be on thermal power stations. The construction period for these plants is being shortened by using better project management techniques, *i.e.* NTPC at Singrauli, and other super thermal stations and by BHEL at Parli in Maharashtra. Standardisation and layout would go a long way in achieving these objectives.

For using low grade coal, design of fluidised bed boiler is under development for ranges up to 5 to 10 mw. In other countries such plants of capacities up to 10 mw are in use. These plants can be set up near the washeries and number of such schemes when in operation will result in improvement of power generation.

It has been possible to improve overall efficiency of thermal plant. by using gas turbines in conjunction with conventional steam turbines, the exhaust gases of gas turbines providing the thermal inputs to heat exchangers for raising steam.

Coal appears to have its own problems regarding exploitation and transportation. Availability of oil is also very uncertain. Nuclear power plants will be contributing a lot to electricity generation in the future. In this context, we have to decide on our policy and the type of nuclear reactors to be used in the country keeping in view availability of resources in India to overcome dependence on foreign countries. Breeder technology appears to be a promising possibility.

Policy of location of power stations : Most of the coal mines are located in central and eastern India. State Electricity Boards locate thermal power stations within their states resulting in transportation of coal over long distances. Moreover, our coal has an ash content of about 30 per cent to 40 per cent. Hence, a decision is to be taken whether to allow transportation of coal over long distances or to transmit power over long distances instead. This would necessarily mean setting up of thermal power stations under the central sector like NPTC. *etc*, at the pitheads and then distributing power to various States which do not have either the coal or the hydel resources. Transmission of power over long distances would essentially mean using EHV and high voltage direct current transmission techniques. Similarly, the nuclear power development programme would have to be seen in this context and it would be desirable to locate such stations near the seacoasts from the point of environmental conditions and availability of water. The location of such large thermal and nuclear stations would reduce considerable load on the railways for transportation of coal. On the other hand this would necessitate interconnecting very closely various state grids and would lead to formation of stronger national grid.

Development of transmission systems

A development of strong transmission system is a natural corollary to the increase in power generation capabilities, otherwise increased generating capacity would have limited benefits. If the large stations are set up near the pitheads or on the sea-coasts, evacuation of power from these stations would need a very strong inter-connected national grid. An effective transmission system of transmitting power over long distances would need transmission lines in EHV/UHV* range and also introduction of *HVDC. These are important from the technical and economic point of view. HVDC is a new field of transmission and it has not been developed in India. Advance planning and R & D work would have to be done before such high technology system can be introduced.

Load despatch centres: The formation of strong national grid would require introduction of load despatch centres all over the country to ensure automatic flow of power from one region to another to meet the needs of various load centres. This would need to have a very good communication system like microwave system. In addition, to enable load despatch engineers to take quick decisions, microcomputers and micro-processes will have to be introduced. The complex calculations which need to be done effectively would take a long time if done manually.

For meeting very small loads, especially, in the rural areas, certain non-conventional methods can be considered. One such method is of tapping an EHV line and using its capacitance coupling effect for feeding small loads.

Management

The responsibility of generation and distribution of power is with the various SEBs and central organisations like National Thermal Power Corporation and National Hydro Power Corporation. Considerable proportion of plan outlay is invested in this sector and another Rs 25,000 crores is to be invested in this sector in the next five years. The SEBs

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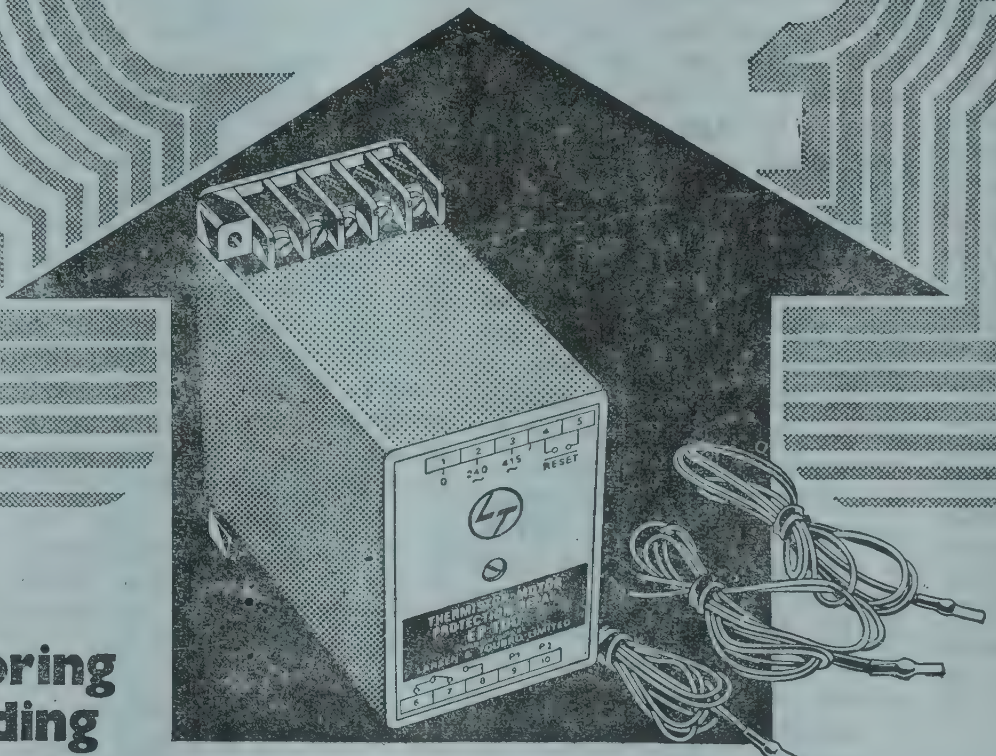

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and the largest commercial organisations employing very large workforce. As the main objective is to ensure commercially efficient working, it is desirable that SEBs use modern management techniques. This aspect was discussed during the power ministers' conference held in January 1978. Also recently Rajadhyaksha Commmittee on Power has submitted its report to the Government on planning for power development, project promotion and implementation, operation and maintenance, financial management, rural electrification, organisation management, research and development and short term measures to alleviate power shortage.

In view of the importance of the issues involved it is recommended that time bound programme may be drawn up on implementation of the acceptable suggestions.

From the point of view of engineering profession, it is proposed that we should have an all-India service of power engineers available to various SEBs and Central Government utilities for planning, operation and maintenance etc. This cadre would also have to develop disciplines to deal in diverse technical fields involved and which vary very widely such as electrical power technology, instrumentation and control engineers, metallurgical, coal technology, chemistry and hosts of other such disciplines. The cadre should be professionally oriented and interchange would depend on the type of disciplines involved. We should ensure adequate career growth in all diciplines. Rajadhyaksha Committee report has dealt with this subject in depth and in detail.

Short term measures to improve power position

To meet the immediate power needs, and to reduce gap between the demand and supply, improvements and renovation have been carried out in a number of power stations and this has substantially improved their performance. Improvement in performance is also possible by using better operation and maintenance techniques in power generating stations, and better spare parts management. One area which requires further immediate action is that of 'auxiliary equipment'. These items require improvement both in quality and specifications. Consideration can be given to replace some of these items by those with better specifications.

In case of hydro stations, better water management is needed.

In our effort to improve the operational skills, as bigger and complicated sets are being introduced, steps need to be taken to strengthen CEA training institutes. For this purpose, a separate society has been formed by Energy Ministry under a Director General. Additional institutes will also be set up. It is also the intention that the operators should have proficiency certificates before being posted in a power station. Special intensive training courses by manufacturers would assist in avoiding maloperations.

Conservation of energy: Efficient use of electrical power in industry, the largest user, needs to be examined. Government may have to insist on minimum efficiency levels for electrical power utilisation but consumers themselves could do a lot. In addition, in this field, ISI with certification mark schemes, has a role to play in such items as pumpsets, motors, etc.

R & D in power sector

With setting up of super thermal stations, at pitheads, hydro stations in remote areas and introduction of extra high voltage, ultra high voltage (750/1,000 KV) and high voltage DC for evacuation and inter-flow of power, number of technological problems are likely to arise requiring intensive R & D efforts by SEBs, CEA-CPRI. Power development programme as envisaged is also likely to involve application of micro-computers and micro-processors. It is recommended that these problems are identified now and responsibilities fixed on the participating organisations to have reliable solutions well in time.

Present expenditure in R&D in power sector is very meagre. Matching 'R & D' work will have to be also done by the respective manufacturers of equipment involved Perhaps CEA is best suited to coordinate this work at national level.

Project management, planning, standardisation

For proper execution of projects bunching of orders is to be avoided as far as possible. Power development has to be phased out on monthly basis to ensure regular supply of material and components and to ensure not only planned achievement in erection and commissioning of new plants, but also to ensure that the manufacturers can take steps to meet various spares requirements.

Each project needs to have a chief executive appointed soon after sanction of the project and should continue till successful completion of the project for ensuring smooth running and timely completion of the project and single point responsibility. He should have the required infrastructure and adequate financial and administrative support from management. It has been experienced that divided responsibility leads to a lot of bottlenecks and delays.

All these are possible only if funds are available in a planned manner as and when required for which advance planning is necessary. The starting point of power station project is the layout design and formulation of specification of various items of equipment. These need to be standardised as far as possible and specified very clearly, so

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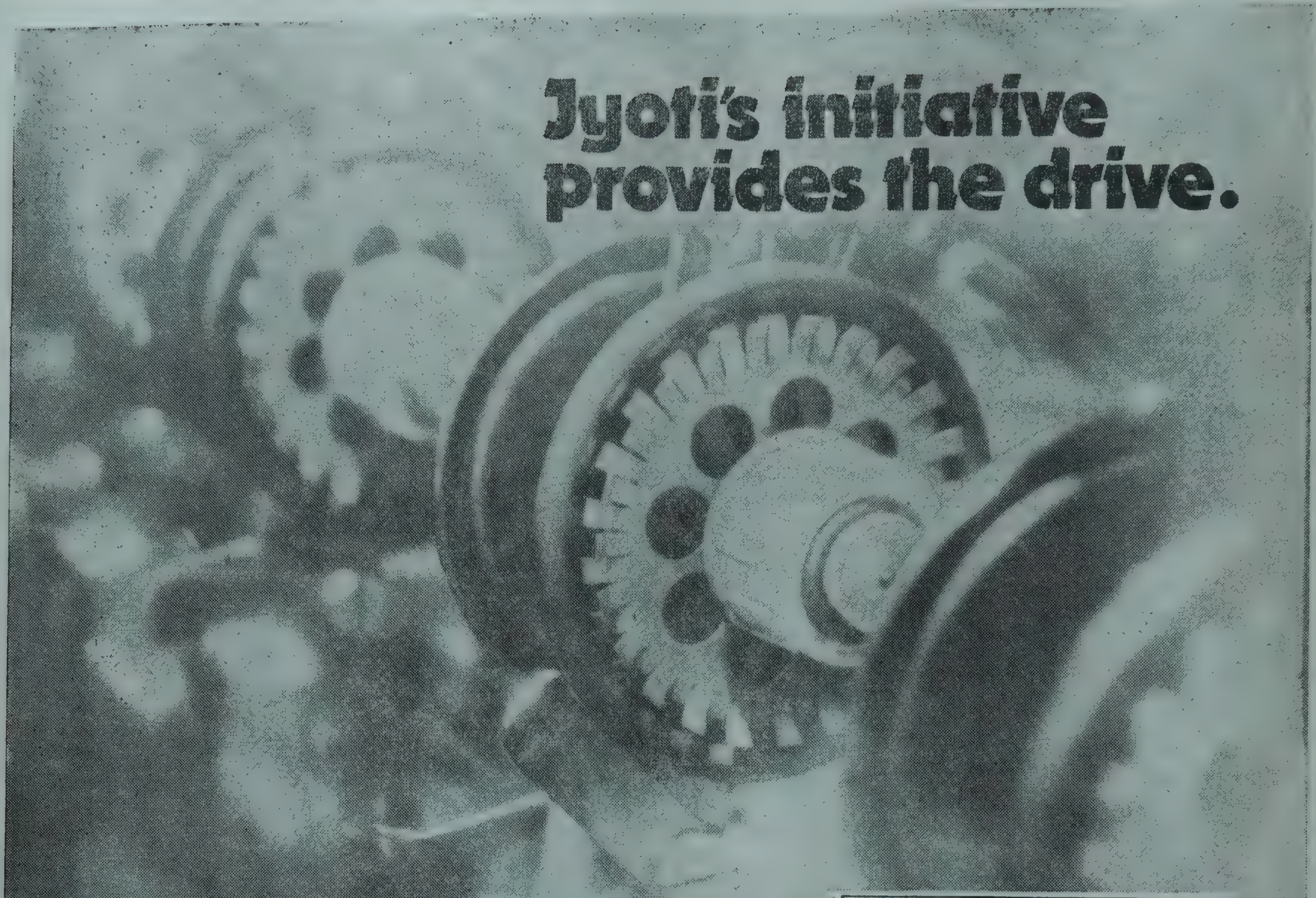

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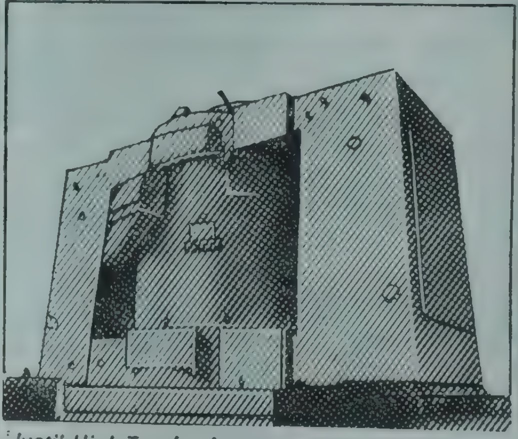

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that modification could be avoided. Power station engineering is as important as the execution of the project. Hence to reduce overall cycle time of execution of projects, standardisation of power station engineering and layout is of utmost importance.

Role of consultants

For a massive development programme, consulting engineers or similar organisation along with CEA have a very major role to play. The whole power station and power system design is normally conceived as a total system which would mean that a well thought out technical investigation is required for integrated development of power programme. Hence, the effort would be to strengthen the consulting engineers' capability in the country. Standardisation of power station layout would go a long way in reducing the time and cost for setting up such stations. The standards layout should allow for the working conditions prevalent in this country rather than following practices of foreign countries. It may be necessary to have a review of the philosophy of power station design by building in the necessary redundancy in various systems to improve the overall reliability of the power stations. The consultants have equally important role during construction and commissioning of the project. It is they who advise the SEBs on the specifications of various items of equipment. It is absolutely necessary that their participation is ensured till the commissioning of the power station and taking over by the operation wing of the SEBs.

Role of manufacturers

To meet this massive power development programme, indigenous manufacturers have to not only keep pace with current needs of power system both in quality and quantity, but have to plan and develop in advance resources for design and manufacture of various items of equipment involved. Based on the experience gained so far, the equipment has to be made suitable for Indian environmental conditions and lot of R & D effort needs to be put in. Expenditure on this aspect in India is only a fraction of what contemporary organisations world over spend. Because of scarce capital and acute shortage of power, quality of equipment both in design and manufacture should be approaching 'zero defect' level as we can ill-afford any breakdowns or shutdowns.

Manufacturers can also help in training of operators in their equipment. Availability of spare parts and services have to be of the same standard as prevalent in advanced countries.

The challenge of the future

All this needs highly trained and mature engineering manpower. Advanced planning and orientation in technologies would help in meeting the future challenge of providing equipment to meet this colossal power programme.

The country's massive power programme requires various items of equipment not only of high reliability but also of up to date technology developed suitable for Indian conditions. ISI Standards are based on feedback received from actual operating experience. Hence, manufacturers should endeavour to continuously improve their equipment. In a near monopolistic situation this seldom happens. Hence Government may examine whether some sort of competition is introduced in the industry. This will not only lead to better designs but also make available to users alternative technologies. Demand is large enough to ensure economical loading and working of manufacturing plants.

To match the demand, the power generation capacity has to increase at a much faster rate than is happening in other countries. Similarly, time for construction, commissioning and stabilisation of such power stations has to be shortened. Transmission systems have to be strengthened for formation of the national grid for ease of interchange of power between SEBs/regions. Arising out of policy on power development, certain technical problems, *e.g.* impact of 500 mw set, UHV/HV DC transmissions, are likely to be thrown up which would require that R & D efforts are undertaken well in advance. Manufacturers of various items of equipment would have to plan, develop and take steps well in advance to ensure timely availability of equipment both in quantity and quality. Matching R & D efforts would be needed for this purpose.

To achieve these objectives, human effort and management has to be rationalised. Proper training, career planning (enhancement of technical skills and knowledge) should be some of the essential prerequisites for such a gigantic task.

Turbines and generators : Some technological aspects

Concluded from page 21

coils have been giving trouble in service. In recent years, BHEL have introduced the improved mico-plast insulation and it is most likely that the new system of resin-poor tape and vacuum impregnation (as for KWU turbogenerators) will also be adopted for the hydro-generator coil insulation. Two orders received from New Zealand for a large number of 50 mw hydro-generators highlight the fact that the technology and manufacturing capability of BHEL is well accepted in the export market, not to say of the competitiveness in price. In contrast, BHEL seems to have made no headway on water turbines and it is likely that the technology level may be one of the factors against them.

Insofar as the technology of the water turbine is concerned, it may appear that the introduction of a new technology from any of the firms which are having a large share of the world market based on ingenious design features and superior technology, may have some justification. It is well known that the manufacturing operation for water turbines involves a large quantum of skilled manual labour for high class welding, fitting and assembly of heavy plate work besides machining and grinding of over-size components such as castings, forgings, rotor blades, etc. The Central Foundry Forge project of BHEL, Hardwar, has made good progress in the production of small and medium size of stainless steel runner castings for Francis and Pelton turbines and the cast-steel blades for Kaplan turbines as also of large size shafts of simple profile. In course of time, it is expected that heavier runners and special shafts (such as off-set forgings) would be successfully made available. In view of all this, the water turbines, generators, valves and allied equipment could be an ideal line of products for India to make a breakthrough in the world market. Some of the senior consultants and experts feel that the Japanese equipment, by the use of high tensile steel and many other innovations in design is about 20 to 30 per cent less in weight and price than BHEL machines. With concerted effort, backed by superior technology, this position should change and help India to get a good share of the world market.

It is clear from the above, that there are still many problems to solve and much improvement to be made. Even so, a steady flow of large and medium power generation equipment has been established with a fair level of efficiency and economy. This will pave the way for a good future for this industry.

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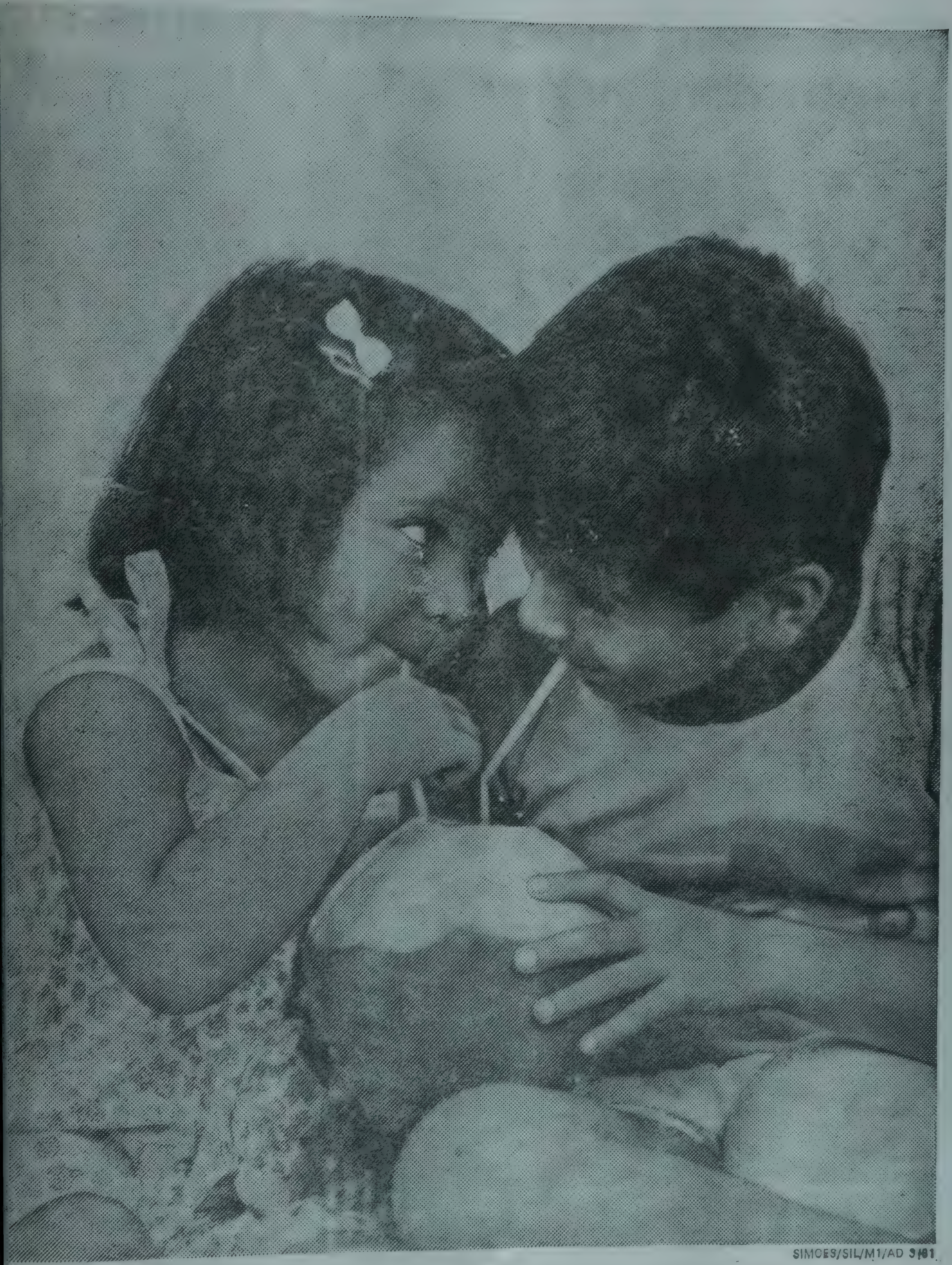


SIMOES/SIL/M1/AD 3/81

Turbines and generators: Some technological aspects

By S. SWAYAMBU

ALMOST all product lines in the heavy electrical industry call for a high level of technology and it is by far the most sophisticated in respect of turbines and generators. This segment of the electrical equipment industry has been exclusively entrusted to the BHEL, presumably in view of the heavy capital investment, large manpower deployment and the long gestation period. In the last fifteen years, a great deal of effort has gone into the setting up of the manufacturing facilities, training and transfer of foreign technology. More than all is the acquisition of a good proficiency in the design and engineering aspects, which undoubtedly form the key to the success of the project over the long term

Compared to the more advanced countries, India entered this field fifty years late with very little background experience in the design and manufacture of even small machines. All at once our men, after a patch of training, were exposed to technologies, machines and processes of very large dimensions and this would necessarily take a toll in time and cost resulting to some extent, in frustration and disappointment all around. However, given the patience and encouragement, the technocrats and artisans have made a success of the trust reposed in them. The present position and the future needs in respect of the technology aspects is intended to be reviewed briefly in this article.

Steam turbines and generators

At the outset, one would like to know why India should have entered into three technical collaborations from three different countries for manufacture of steam turbines and generators at three locations, covering to some extent nearly the same ratings of machines. With wide disparity in design and manufacturing practices, this has obviously resulted, over the last 15 years, in a tremendous effort in the transfer of the respective technologies. The original intentions for this multiple collaborations, have not been spelt out anywhere but it is obvious that it is a historical outcome of India having to avail of whatever foreign assistance programmes were fothcoming at that time (mid and late fifties). Even though three different locations were established, each one was planned and equipped for a limited quantum of output only, so that the total production would match the country's requirements for thermal plant, which was expected to grow rapidly in the seventies and after.

Mr S. Swayambu

However, based on the experience so far gained, BHEL has recently started to integrate and rationalise the technologies and oprations at the three plants. The larger Hardwar Plant is being expanded for the manufacture of sets up to 500 mw and possibly larger as and when required in future. For the enlarged manufacturing programme of 200 mw and 500 mw steam turbines and generators, a newer technology from a West German group known as KWU has been obtained by a new collaboration with the intention of replacing the earlier USSR technology already adopted for the 200 mw turbine and generators. In the meantime, the plant at Hyderabad has reduced the output of 110 mw sets based on the old Czech technology and increased the production of industrial turbines in the range of 3 to 30 mw based on a separate Siemens collaboration. The present trend however, seems to point out that the existing Czech and Siemens technologies will gradually give way to that of the more up to date KWU tie-up covering a range of industrial as well as condensing power turbines of ratings in the range of 1 to 200 mw along with a range of matching turbo-generators.

The Bhopal factory, which has been planned on GEC (UK) collaboration for 120 mw sets, would gradually cut down the production of this machine and instead take up a limited programme for the 200 mw sets of KWU design. The 235 mw steam turbine (of English Electric design) for Indian atomic power stations would of course be continued at Bhopal, with the matching turbo-generator (of USSR design) being made by the Hardwar plant. It would, therefore, appear that a kind of hotch-potch programme based on three technologies has been useful only to the extent of helping the Indian engineers and workers to acquire some technical and manufacturing skills of the difficult line of large turbine and generator by three different routes in the initial years. Obviously, it should have entailed high cost of setting up plant, tooling, training, indigenisation and transfer of technology of three systems as compared to that of a single system. Even so, the BHEL has recently made a deliberate plan to opt for yet another technology and unify the designs and manufacturing techniques, which no doubt would demand a great deal of further effort and expenditure. Nevertheless this is a step in the right direction.

BHEL has been guided by the fact that the three earlier technologies are about 25 years old and that for the vastly increased existing and anticipated demand for thermal plant in India which call for the installation of sets of larger ratings (500 mw, a change-over to a more up to date technology would be in the overall national interest. Admittedly, the unification of the systems in all the three plants would result in increased overall output and lead to a greater acceptability in the overseas markets paving the way for larger exports. In this connection, some confusion has been created on account of the public controversy which raged for some time over the proposed "umbrella type" collaboration with Siemens of Germany which is one of the partners of the KWU group.

Some people raised doubts whether the technology of KWU was in fact as good as what a few other well-known multinationals like G.E. of USA, B.B.C. of Switzerland or G.E.C. of the UK, could offer. Due to machine outages in thermal power stations in the last few years for various reasons, charges and counter-charges were being made between BHEL and the electric utilities as to the apportionment of responsibility. This situation has inhibited an objective view of the role played by design and technology and the supporting foreign collaboration. The following are some of the important points which would lead to a dispassionate understanding of the subject:

(1) The steam turbines of all three makes (based on the

Mr Swayambu is a consulting engineer and former chairman and managing director of Heavy Electricals (India) Ltd.

USSR, the UK and Czech types) are intrinsically sound and rugged machines and have been giving good service availability. Most of the causes for plant outages are connected with boiler and turbine auxiliaries, piping layout and instrumentation.

(2) The matching generators have also been performing well, except for a few cases of rotor failures.

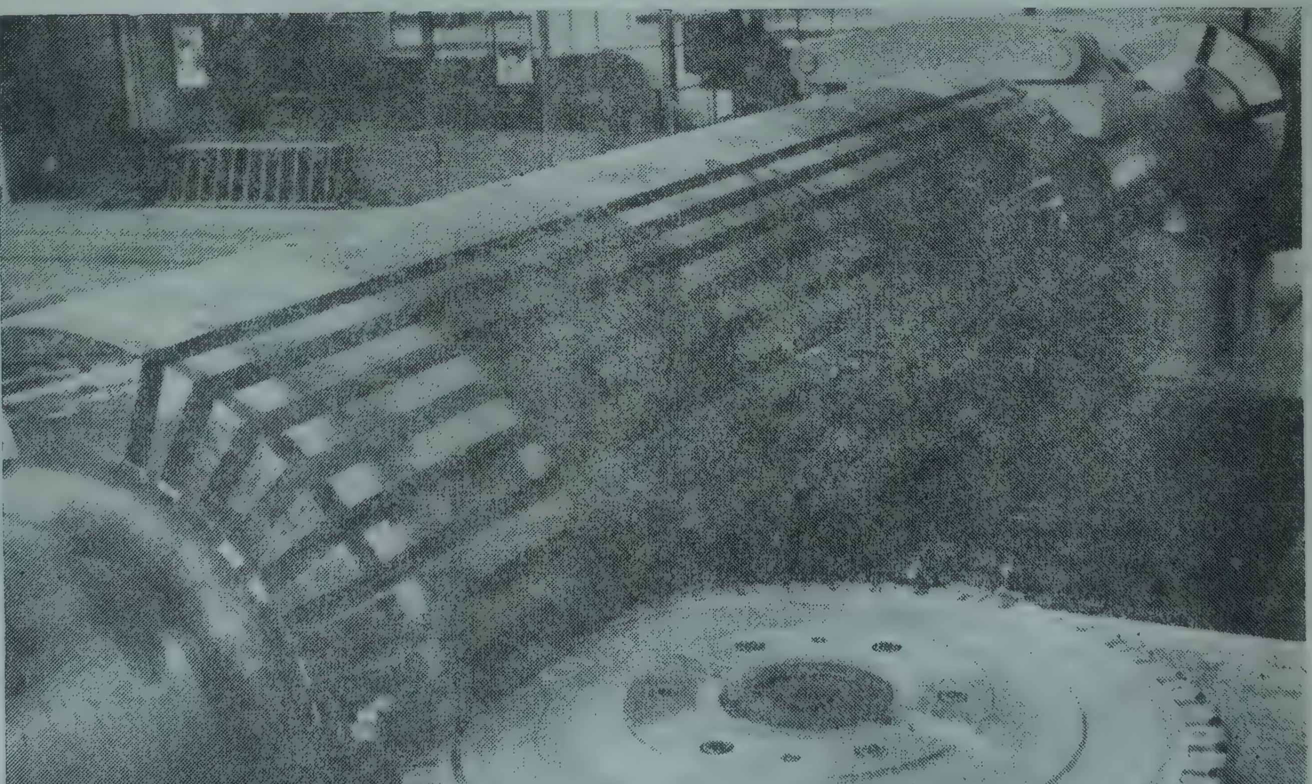
(3) Despite the above experience, a change-over to a more up to date technology is considered inescapable from the point of view of lining up with other world leaders in this field with a view to realising improved economy in manufacture and better operating performance. This would also result in increasing exports in future. During the sixties, a large number of G.E. (USA) sets have been installed in a number of Indian utilities under some aid or credit facilities. Experience on these machines has been very satisfactory and utility engineers rate the G.E. technology as very good. At the same time, they concede that the choice of the new technology is essentially a matter for the Government of India/BHEL. In actual fact, several excellent features do exist in the KWU design of 200 mw set which are considered to be most suitable for Indian operating conditions. These are : (a) A fairly short start-up time of 210 minutes for cold start. (b) A quick hot start in 10 minutes (realised through an HP/LP by-pass). (c) Provision of a turbine stress evaluator (to monitor stress under planned overload conditions). (d) Instrumentation is very versatile. (e) A very good heat rate. (f) The set could cope with a fairly wide range of frequency variation. (g) The set is easier to maintain (claimed by BHEL). (*h) The generator insulation system is of a superior type. (*i) The generator up to 250 mw is of non-water cooled design and is easier and less expensive to manufacture.

As compared to a 200 mw turbine of USSR design, the KWU machine is about 14 per cent lower in weight and somewhat shorter in overall length. The general feeling among consultants and senior plant engineers seems to be that based on the limited Indian utility experience, there is no scope to compare the merits of different technologies and that the KWU design should be deemed to be a good modern technology, probably, as good as what any other major international company could offer. The generator of the USSR design is being continued to be offered with the KWU turbine and a phased programme for the manufacture of KWU type of generator would be formulated when the related equipment for the new insulation system for impregnation of coils under vacuum, test facilities etc are fully established.

From the manufacturing point of view, the KWU design approach has one great advantage, in the modular feature covering a wide range of steam turbine ratings. A single modular system covers the bigger sizes from 200 to 1,000 mw, while another system covers the range below 200 mw. While the Indian market could be catered to by means of a few standardised ratings, such as 60, 110, 200 and 500 mw, the export market often calls for a variety of ratings (*e.g.* 150, 250, 350 mw *etc*) which could be met only if the facility of a modular design is available. In the long term, this would move BHEL to a competitive position in the international market, when Indian engineers acquire the ability to develop new designs of assured performance and quality standards. A good example of this potential capability among Indian engineers is provided by a striking piece of local development work to modify the USSR 200 mw turbo-generator for reversing its direction of rotation so as to couple it with the new KWU steam turbine. This has enabled the phasing out of the KWU generator manufacturing schedule by a few years to suit the operational needs of the factory.

An index of satisfactory technology transfer consists of the rate of indigenisation of imported components. For the 200 mw USSR design of turbine and generator, it has reached a level of over 70 per cent by value, the balance items under import being some of the large castings and forgings. BHEL's own captive foundry and forge plant (CFFP) at Hardwar has made commendable progress in successfully producing, since it started three years ago, a number of items of alloy steel castings and forgings for the 200 mw USSR set except a few over-sized forgings like rotors for the TG and the LP rotor for the turbine. It is expected that similar developments for the KWU set will also take place resulting not only in rapid rate of indigenisation but also help reach a high level of over 90 per cent in the next few years.

Following, the 1977 collaboration agreement with KWU, BHEL has received approval for a major expansion of the factory facilities at Hardwar costing Rs 43 crores (at 1978-79 prices) and as of early



Milling of ventilating slots on 110 mw rotor in Turbo Alternator Division of Bharat Heavy Electricals Ltd, Hyderabad.

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* **Presently, the KWU** generator has not so far been taken up for production, although the collaboration

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1981, over 50 per cent has been completed including a modern shop for the manufacture of turbine blades. The giant overspeed test bunker is under construction and all the items of work would be completed within the next 18 to 24 months. With the addition of these new facilities, the requirements of the KWU technology for sets up to 500 mw (and even larger sets in future) would be fully covered. It is, therefore, obvious that technology-wise, both in respect of design and manufacture, BHEL is getting to be fully equipped. As the KWU technology also gets established at Bhopal and Hyderabad in the interim period, a greater measure of standardisation would result. A further line of KWU technology would be available by a new collaboration agreement entered into in January 1981 for the lower range of turbines including industrial turbines.

Water turbines and generators

The manufacturing facilities for water turbines and the matching generators in the medium and large ratings were established both at Bhopal and Hardwar plants of BHEL and the production activity started in mid sixties and gradually picked up momentum in the following years. The technology for the Bhopal factory was obtained from the English Electric Co for water turbines and from the AEI for generators, both the UK firms. The technology for the Hardwar plant was provided by the USSR both for the turbines and the generators.

The design approach for water turbine and the matching generator set is radically different from that for steam turbine and generator set. For the latter, certain standard ratings of machines are fixed for the manufacturing programmes so as to make a reasonable coverage of the market demand over a period of years, thereby deriving the advantage of repetitive production of a few sizes. On the other hand, the ratings and types of water turbines and generators are determined with reference to the site conditions of each project, such as the head, water storage, flow regimen, power potential, the operating parameters of the power system, etc. Consequently, every water turbine and generator set requires to be tailor-made taking all the factors into account resulting in a near exclusive design for each project.

Broadly speaking, three distinctive types of water turbines are in use to cater to the low, medium and high heads, known respectively as Kaplan, Francis and Pelton turbines. Design-wise and component-wise, these three types are substantially different from each other but could be handled by more or less a common workshop facility for metal fabrication and machining. On the basis of the known characteristics of the hydro-electric potential in India, the majority of sites require Francis turbines (approximately 70 per cent) while the Kaplan and Pelton would be sharing the balance 30 per cent. The Kaplan type which caters to low head conditions, is called upon to handle a large volume of water discharge and hence is physically large in dimension and heavy in weight per KW of power generated. The reverse is the case with Pelton turbines, but much higher pressures and speeds will have to be catered for.

During the last 15 years of BHEL's involvement with the design and manufacture of hydraulic turbines, machines for a wide range of ratings from 10 mw to 160 mw covering all the three types referred to above have been successfully designed, built and commissioned. The first few machines were wholly designed by the foreign collaborators with Indian trainee engineers being associated with the design and drawing work done abroad. The next few machines were largely designed by BHEL design and engineering teams at Bhopal and Hardwar and vetted by the respective consultants. The subsequent machines of the conventional types were by and large designed by BHEL engineers and built and tested successfully in the two Indian factories.

The essential aspect of the individual design of turbines rests in the pre-determination of the performance of the machine by means of a scaled model test in a specially equipped hydraulic test laboratory. In the early years, a suitable facility was not available until the Cavitation Laboratory at the Central Water and Power Research Station (CWPRS) Pune, was set up for hydraulic experiments and tests. A number of turbine model tests were undertaken at CWPRS in the late sixties and early seventies which provided the necessary technical support. In recent years, a well equipped model test laboratory has been set up at BHEL, Hardwar, and this is meeting the test requirements for the turbine design work.

The process of technology transfer comprises mainly in learning the principles underlying the design approach and the collaborator's experience and feed-back information on the behaviour of a large number of turbines manufactured and placed in service over the past few decades. New designs are based on the large store-house of such performance data and often times slight modifications to an existing design could result in a new design which could then be improved by the incorporation of new material techniques and the performance of the turbine established by model testing in the laboratory. From this point of view, the longer the experience of a manufacturer, greater would be the access to first hand design engineering and performance data. As relatively new entrants in this field, BHEL will have to go through another 10 years of experience and enlarge their data and performance base before they could claim equal stature with international companies. So far, the largest rating of Francis turbine built by BHEL is the 165 mw machine for the Dehar power house in Punjab. It is hoped that in the next few years a few machines of larger ratings may be proposed for some of the new projects and BHEL could then move upwards in their capability.

In most of the advanced countries, hydro-electric potential has been almost fully exploited and they are moving in the direction of pump-storage schemes wherever feasible, which require reversible type turbine-generators, capable of dual functions, *viz*, turbine/pump and generator/motor. The technology required for this type of set is not only highly sophisticated but is often connected with large machine sizes. In recent years, single reversible units have been built for individual ratings around 500 mw. Conventional sets of this rating have also been reported in a few locations where hydro-electric potential available is large. In India, the pump storage schemes have been somewhat slow to get promoted and only in recent years three or four schemes have been sanctioned and these are currently under implementation. For this, BHEL went in for limited collaboration with one or two foreign companies on a project by project basis. A large scheme of this type, at the Nagarjunasagar Dam in Andhra Pradesh, has been undertaken with the equipment supplied by a leading Japanese firm and BHEL have purchased the technical data and drawings for these machines, so that similar sets covered by Stage II of this project could be made at Hardwar/Bhopal.

Insofar as the matching generators are concerned, the design approach is more or less straightforward as these machines are required to line up with the speed and the mounting and supporting details of the driving water turbine. The electrical rating is made proportional to the size of the turbine, subject to certain adjustments required to match it with the power system parameters such as power factor, short circuit ratio, frequency, voltage regulation, etc. The insulation system is important as some of the early generators which adopted the "bitumen" impregnation for the

Continued on page 15

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Energy losses: Some reduction methods

By S. Y. KOTWAL

MUCH has been said on the necessity of reducing losses and utilising renewable sources of energy. However very little has been done. The following analysis attempts to throw some light on this.

A look at the Maharashtra State Electricity Board's "Conditions and miscellaneous charges for supply of electrical energy" January 1976 edition shows that for three-phase supply, the limit of maximum current demand is placed at three times the full load current, for motors up to 3 HP, two times the full load demand for motors up to 10 HP and one and a half times the full load demand above 10 HP and up to 50 HP.

The author attempts to show how this archaic rule leads to a lot of wastage in the unnecessary use of costlier starting gear since it does not stand on solid ground.

Limits are placed on the maximum current demanded by a three-phase induction motor during starting because it draws from the mains, a reactive current which causes a voltage dip for the duration of the current. This reactive current touches a peak value and progressively drops down. The duration when the peak value is sustained is transient in character whereas a steady value will be sustained for a period long enough to enable a reading to be made. The supply authorities are concerned about the effect of this steady value for a short duration on other installations supplied from the same feeder. The concern of the electric supply authorities for their customers is legitimate and business like. But the rule that embodies this concern is both unscientific and archaic.

A more scientific and economic method would be to put a restriction on the starting current as a function of a permissible value of voltage dip due to the reactive KVA/HP permissible on this system. Simply put, a 10 HP motor started from a source of a 100 KVA transformer does not cause the same ill effect, when started from a source of a 250 KVA transformer. To apply a common rule, in both the cases, is like using a sledgehammer to kill both a fly and an elephant. But since there are too few elephants in comparison to the flies, the cost of the sledgehammer becomes a wasteful expenditure. In fact, it is possible to eliminate both flies and elephants by the mere application of logic to the formulation of the rules.

By a rough estimate, anything from 20 to 30,000 starting devices are utilised where a simple starting device would suffice. The difference in costs between a simple direct on-line starter and a complicated star-delta starter is anything from Rs 300 upwards. This involves an unnecessary expenditure of Rs 5 million to Rs 10 million every year. This shows our callousness in looking at the existing state of affairs as something incapable of change.

The same rule also forces the use of costlier stepring motors when a more robust form of squirrel cage motor would suffice. It also compels the use of a couple of thousand slipring motors with their consequent costlier starting gear in spite of the fact that they are far more prone to failure than the former.

A comparison with more pragmatic colleagues in the US who have to deal with similar problems, would reveal how they have based their rules and regulations, with singularly better results.

Aerial mains

A consumer is allowed to draw overhead lines to his premises or the electricity board can use overhead lines to the supplier premises. This is not the case in towns like Bombay and Calcutta, but in smaller towns, even in cities the size of Bangalore up to a few years back.

It is a safe guess that the life-span of a majority of so-called weather-proof wires, acceptable under IS Specification 3035, would not exceed two to three years. This, so-called, weather-proof, rubber insulated and braided wire is still in use. A shift to PVC, as the only insulating material may be one of the possible alternatives. Under the present circumstances, a cost benefit analysis of longer life versus use of scarce PVC as an insulating material, is definitely called for. The difficulty is that the rubber insulated and braided weather-proof wire finds it's way to consumers to whom maintenance is least available. In fact, the same story is repeated in the use of electricals throughout the country. The most shoddy and therefore cheap material finds its way to users who have the least capacity to maintain and overhaul. The most modern and durable equipment is chosen by the most advanced in the country who have the most means to maintain and look after what they purchase.

There is a possibility of manufacturing an aerial cable where the supporting wire as well as the conducting wires are PVC covered. This application, with its inherent safety and longevity has not found use so far anywhere in the country.

Power generating systems

All electrical systems are composed of the same basic equipment. Experience has shown that it is most economical to generate power in bulk, transmit at very high voltage to minimise losses and transform it to low voltages for safe feeding to individual customers in small quantities.

The last transformation occurs in the distribution transformers hanging along distribution feeders. Here, the power is transformed to 415/230 volts and fed into the houses (or pump houses) of individual customers. In a perfect system, the voltage at every point along the line remains constant. But the ideal is impossible to achieve because every electrical machine and element is subject to internal voltage drop. This means that voltage, or the voltage that appears across the output terminals of any such electrical device, changes with load.

The output voltage of transformers varies with load conditions too. When a transformer is excited with rated primary voltage, the secondary left open, and a voltmeter placed across the secondary terminals, rated voltage is read on the secondary side. However, as soon as load current, flows through the resistance and reactance of the windings, causing an impedance drop, the voltmeter reads other than the rated voltage.

Lines have series impedance too. A line has resistance and reactance, both capacitive and inductive, distributed all along its length. When the lines are short. the capacitive effect is small and considered negligible. When a sending end voltage is impressed, there is no load on the feeder, the receiving end voltage equals the sending end voltage. However, as soon as load current flows through the line, the current causes a reactance and a resistance drop which subtract from the sending end voltage. giving a resultant voltage on the receiving end smaller than the receiving end voltage.

Mr Kotwal is marketing manager, Siemens India Ltd.

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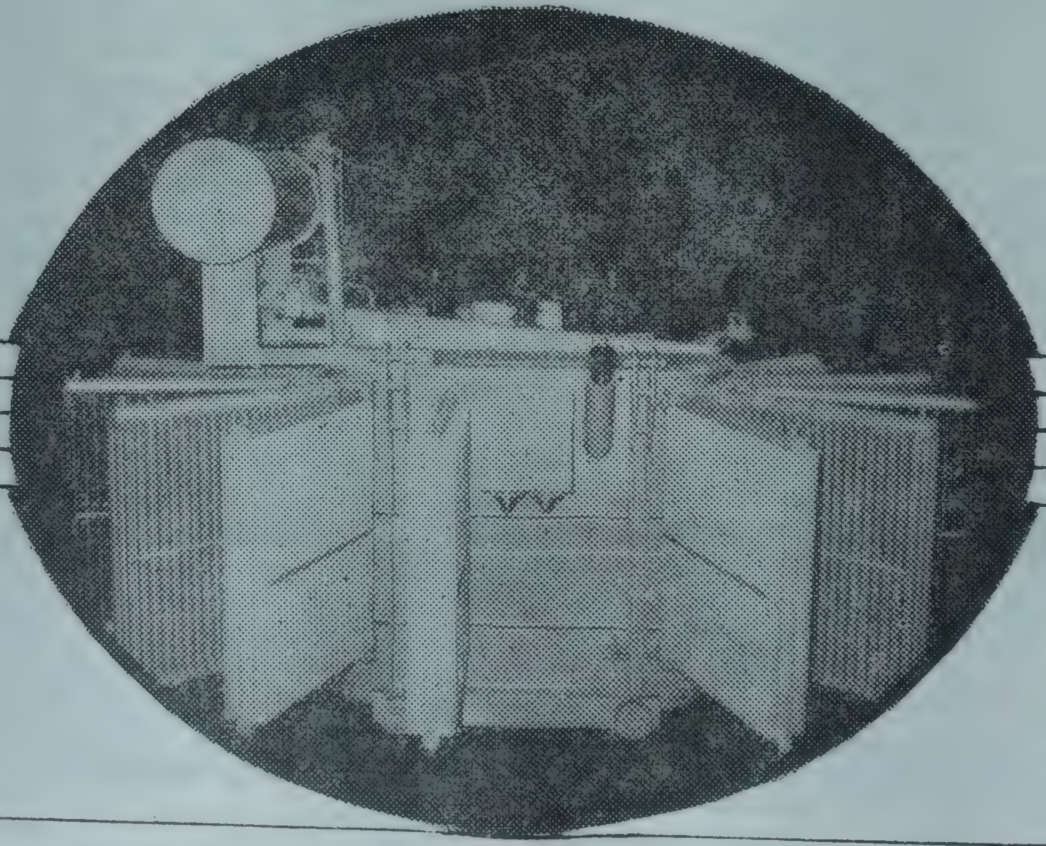

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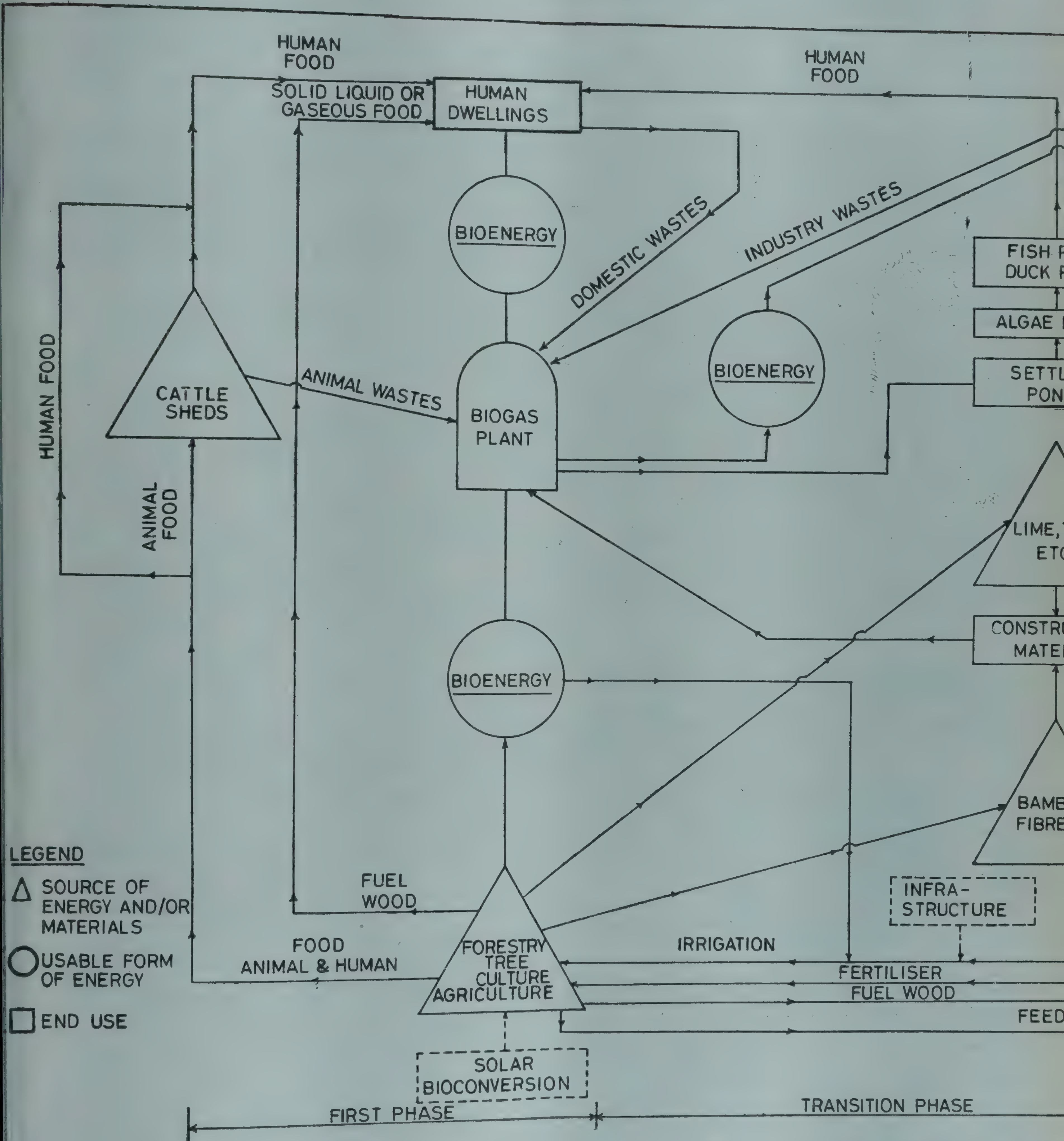
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Fig 1 AN INTEGRATED ENERG

Every electrical appliance is designed to operate at a certain rated voltage. The best operation of that appliance is when the rated voltage is applied. A voltage less than the rated voltage when applied to an agricultural pump, adversely affects the operation of the pump. It draws more current thus increasing losses. This is one of the causes of high losses.

The author has described one of the causes of losses, which are phenomenally high by world standards in layman's language. There are other causes, such as low power factor of operating motor etc. To attempt a technical explanation for this phenomena in layman's language may alter the character of this article without gaining in clarity for the reader. Suffice it to say that low receiving end voltages and low power factors are the two principal culprits in what is described as high distribution losses in India.

Rural electrification corporations have done pioneering work in the field and have even taken certain long range and laudable decisions such as to finance capacitor banks at the various rural substations. To undertake this gigantic task the construction of over thousands of substations is certainly a severe strain on the purse-strings of our country.

There seems to be a better alternative, however, which tries to combat both poor power factor and abnormal voltage drop. This problem exists wherever there are long distribution lines such as in Brazil, the United States, the Soviet Union, etc. An optimum solution would be to use a voltage regulator to control the voltage drop and a capacitor bank to improve the power factor.

To complement the usefulness of shunt capacitors, one could also introduce the in-phase voltage control method. If a low voltage is fed into a regulating device, it can be raised to whatever value desired. Regulating devices are voltage sensitive and are usually automatically controlled. The cheapest of these devices is the feeder voltage regulators.

Electrical engineers in the advanced countries, mentioned earlier have endeavoured to solve this problem though a combination of shunt capacitors and feeder voltage regulators which also gave the best cost-benefit ratio. With their forward looking approach and a very wholesome understanding of the problem, it is certain that the Rural Electrification Corporations would also be most willing to try out this optimising method of reducing the distribution losses. In fact, the technology for the manufacture of feeder voltage regulators is not at all advanced and is well within the capacity of Indian manufacturers. The two connection diagrams alongside of the feeder voltage regulator are typical.

Wind and water

The most satisfying news from the energy front has been the Government's proposal to set up a seperate commission for renewable sources of energy—and what more renewable sources can there be than wind and water?

The history of the use of wind power in India is tragic to say the least. National Aeronautical Laboratories had started a department to develop a windmill capable of harnessing wind even at low speeds. During 1960-64 more than 70 windmills were manufactured and erected by the NAL when inexplicably a decision was taken to close down the wind power division of the NAL.

Escorts, it seems have entered into a collaboration agreement with the world famous MAN of West Germany to fabricate and manufacture the AEROHANN windmill. Data are being collected throughout the costal belt of the country to ensure correct locationing of the windmills.

The author suggests that every future lift irrigation scheme should be subject to a no-objection certificate from various decentralised bodies to the effect that a windmill cannot be utilised due to wind conditions prevailing in that particular region where the new lift irrigation scheme is proposed. Abysmal conditions on the energy front would call for drastic measures. The suggestion is not made lightly or without regard for the administrative problems involved. To monitor wind conditions over a long period and to make these observations scientifically reliable i no mean task.

In this connection it migh be interesting to note tha the National Climatic Centre Asheville, N.C., USA, car supply wind direction dat for any part of the country Here, anemometers (a fairl simple devices which) shoulc not cost more than Rs 1,50 each, which record on : counter, at the beginning anc at the end of any period, th average wind speed durin that period, can be used.

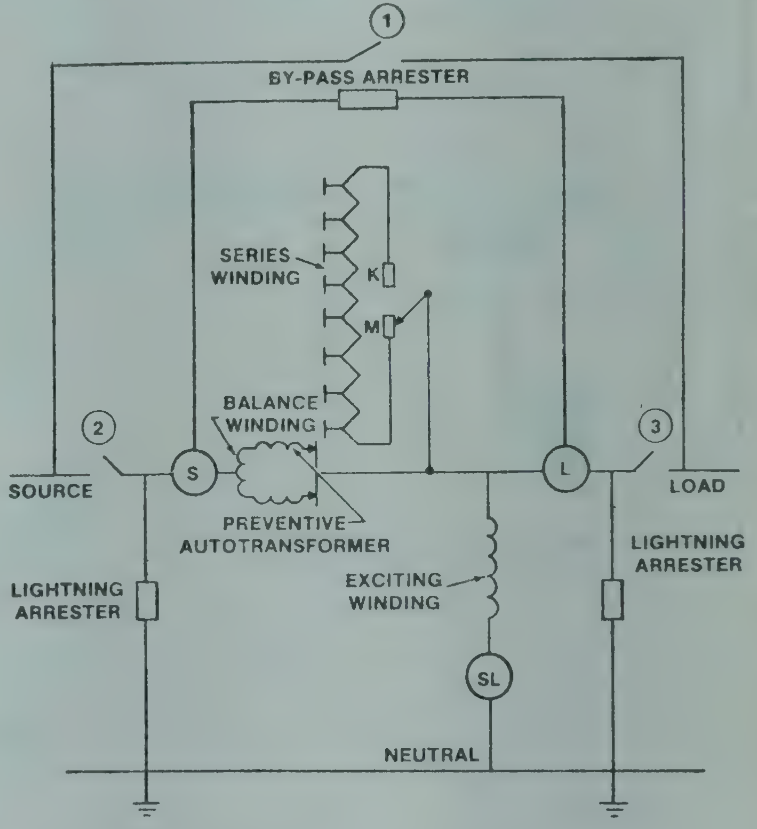

Fig. 10 Wiring diagram of typical regulator showing both external and internal connections.

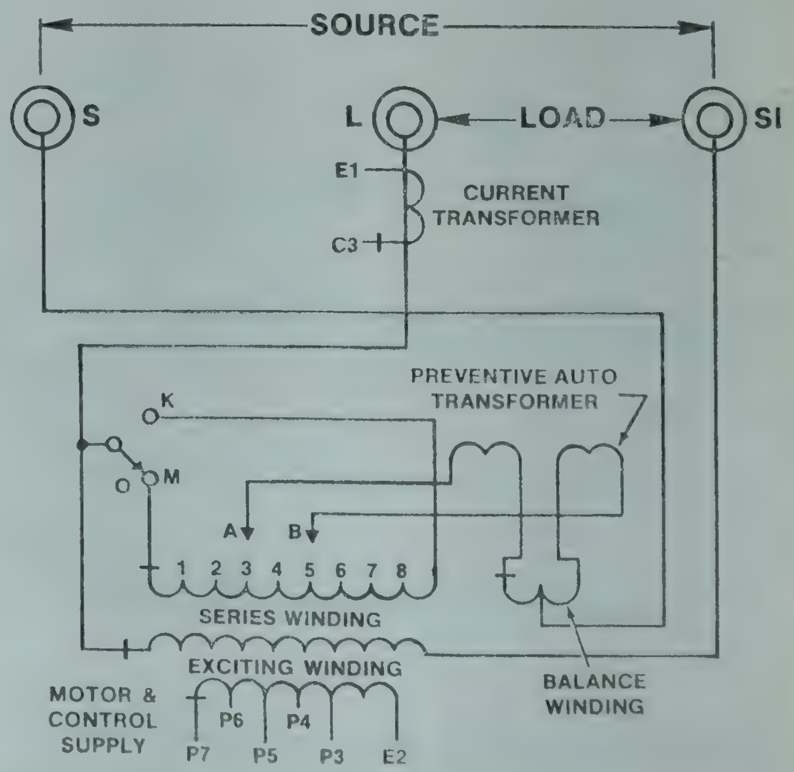

Fig. 11 Schematic diagram of JFR regulator utilizing single potential source for motor and control circuit.

Energy transition and international co-operation

By ENIQUE V. IGLESIAS

SCANNING through history, few topics have attracted the attention of humanity as much as has energy. Energy a fundamental issue to all people permeates the fabric of human life with impact on world politics, on international economics and on national development strategies. In recent years, energy has acquired significant importance due to what has been called, with some ambiguity, the world energy crisis. Three important elements characterise this crisis and situate the problem in its correct perspective.

First, at the beginning of the 1970s, it became apparent that fossil fuels, which have been the basis of the energy balance of the modern world, will in the not too distant future be depleted. For the first time, the rate of reserve discoveries and the rate of consumption growth became inverted providing human kind with a realistic perspective based on scientific assessments that depletion could take place during the next generation. This fact drives home to humanity an urgency of attention to energy that has never been felt before.

The second element of this crisis comes from the fact that for the first time in history, an energy transition will be accompanied by higher economic costs. Until recently, people had lived through a period of cheap energy and depressed oil prices. From now on, energy will be available only at higher prices, setting a new challenge of unknown proportions.

Last, the energy crisis has affected humanity in a very unhomogenous manner. The crisis, affecting both industrialised and developing nations, has had a very special impact on the developing countries. These countries will have to go through their process of economic development and modernisation with much higher energy prices than those paid by the industrialised countries. This undoubtedly presents the international community with a problem of equity and solidarity which should stimulate international co-operation.

Possible options

For the first time in human history, the impending world energy transition necessitates that the international community work and debate collectively on possible options. This paves the way for the Conference to initiate activities designed to lead towards a new world energy mix based on a pluralistic and diversified framework of available energy sources than can provide a horizon peace and security. It would be useful to recall here five elements of this energy transition.

The first element is its inevitability. It appears to me that on this topic there is already a commonly agreed point of view. Oil consumption in the world energy mix will continue to play a significant role although of relatively decreasing significance through the end of the century. The demand for oil will be important in the industrialised world where it is expected that the increment in demand will be of the order of 50 per cent and will be four to five times the present demand of the developing world which requires energy sources to accelerate its process of development and growth. All this will occur regardless of conservation or investment policies. At some moment in the next century, it will be even less significant in the world energy consumption pattern making imperative a new energy mix. This is the inevitable challenge facing the industrialised and developing countries collectively.

The second characteristic is that the transition is viable. It is not possible to say today that the world lacks energy resources. That is not the problem. The problem is the potential scarcity of certain types of fuels, mainly the liquid fuels. Experts have told us on several occasions that energy resources do exist, and point out that the real problem is one of investments in technological resources and in production. We also have learned from the reports prepared for the Conference by the technical panels and expert groups that there will no longer be a single alternative energy source as in the past, but instead a mixture of such sources. Our Conference will deal with 14 energy sources as determined by the General Assembly. A UNITAR Conference has identified more than 40 new sources of energy.

A third aspect of this energy transition is that it will be much more complex than energy transition in the past. A complexity due mainly to the fact that humanity has maintained, over many de-

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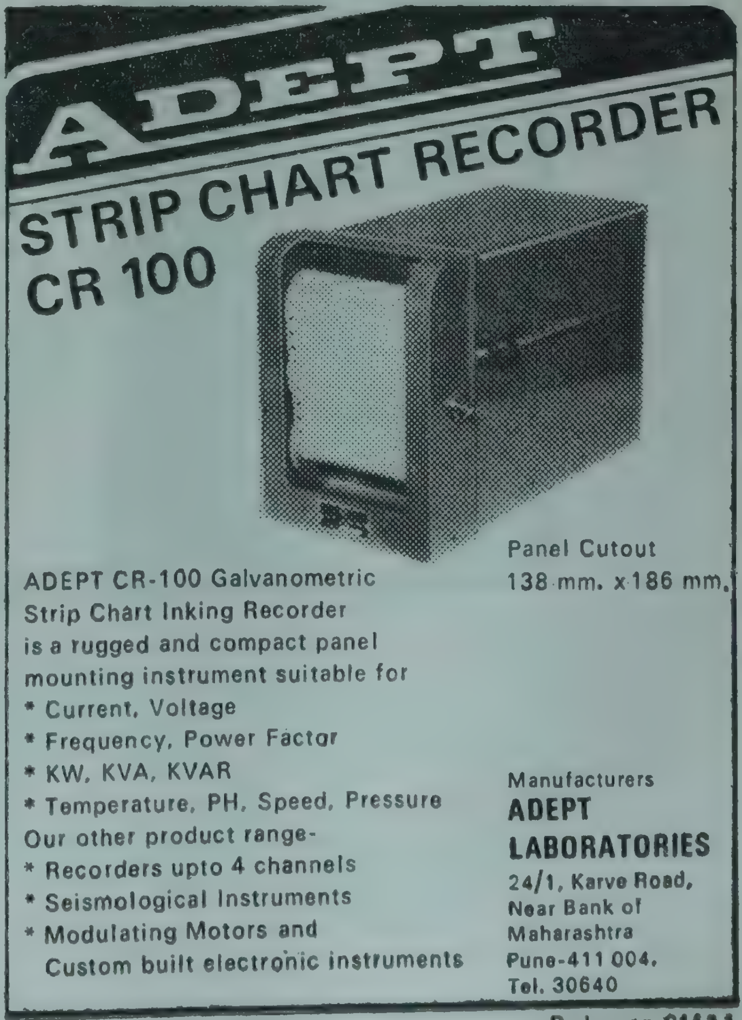
Excerpts from Mr Iglesias's article as published in Urja. Mr Iglesias was the secretary-general of the recently concluded United Nations Conference on New and Renewable Sources of Energy at Nairobi.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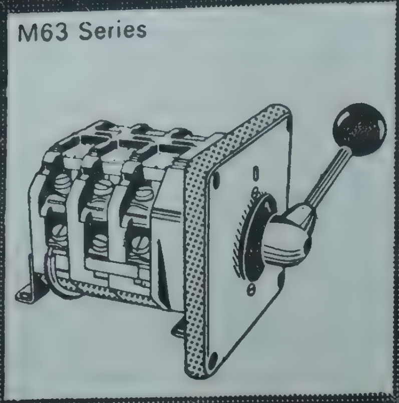

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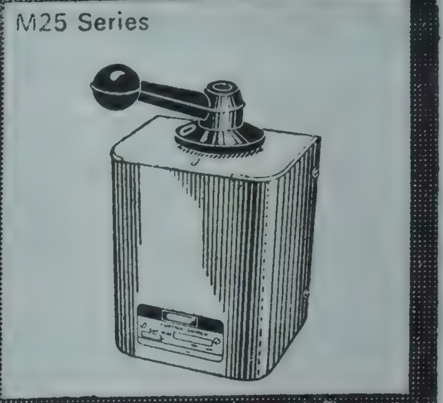

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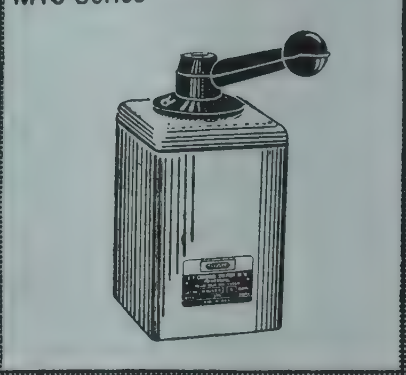

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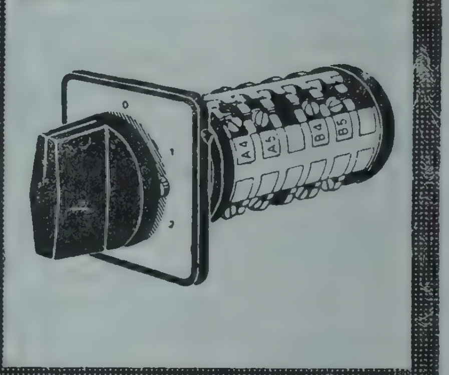

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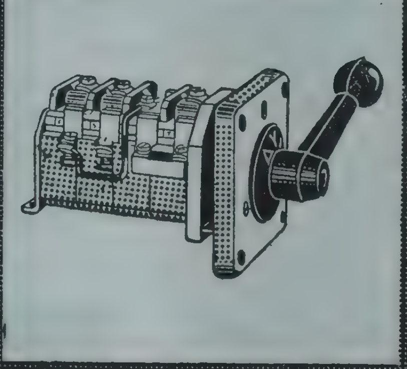

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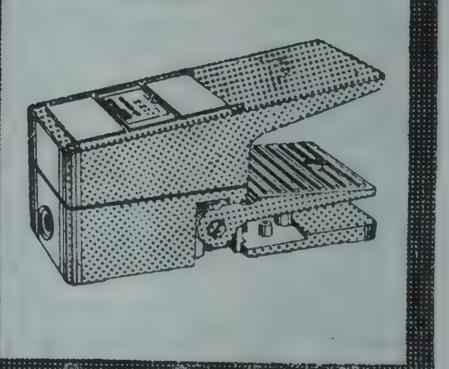

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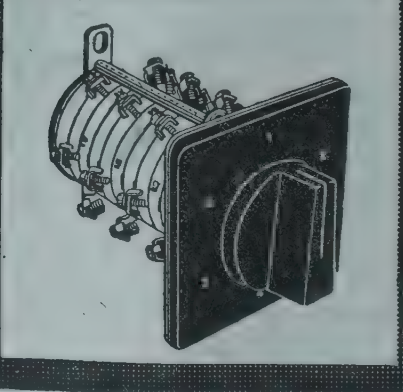

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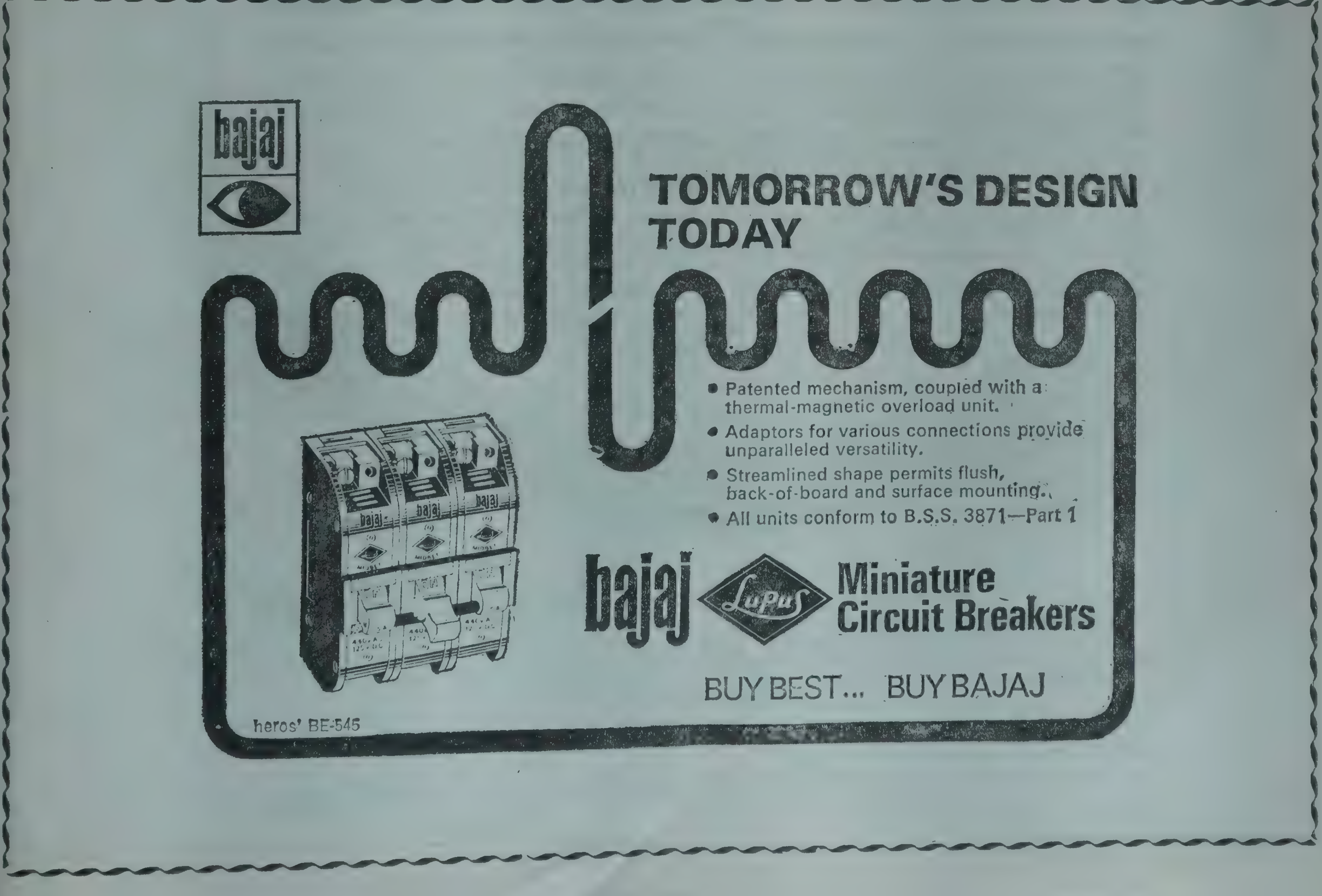
cades, artificially low and depressed fossil fuels prices and that the current adjustment has been produced by a process which has complex implications. Over the short term, the problems of balance of payments, imbalances in the energy bill and imported inflation will affect particularly the developing countries who have not even been able to make adjustments by expanding their exports but who are increasing their indebtedness. At the same time, this transition will mean that, economically, higher and higher proportions of investments will have to be dedicated to energy. In the developing world, this will affect the investment requirements for other economic and social purposes.

Degrees of urgency

The fourth characteristic of the energy transition is that it implies varying degrees of urgency. If we accept the messages we have received from the technical panels and groups of experts, involved in the preparations for the Conference, it appears that the world is facing an energy transition which will manifest itself in a different manner for the modern sector of the world economy than for the traditional sector. To the modern sector, the energy transition presents a strong technological challenge to make available a diversity of energy sources. Yet if we follow historical optimism and humanity's achievements over recent decades in the energy field, there would be no room for pessimism: the world, particularly the modern sector, will always find ways to effect an adequate energy transition. On the other hand, a very different situation obtains for the traditional sector basically located in the developing countries. The rural areas of many of these countries are still operating on fuelwood and charcoal and have not yet made the first energy transition. This is an urgent summons, requiring immediate action. The technical panels and the rural energy expert group have dramatically conveyed the pressure that is exerted on natural resources, on the environment and on the forests by this problem. however, because of the special conditions surrounding the traditional sector, it does not necessarily follow that the past scheme of transition from traditional to more modern techniques in more advanced countries could or should be followed by the traditional sector. The complex issues involved demand the attention of the international community if equipable solutions are to be found.

Lastly, I believe that the fifth aspect of the energy transition involves the efficiency in the use of energy as a fundamental element of this transition. This has been noted very clearly by the industrialised countries which in recent years have made very commendable efforts to conserve energy. However, there is still a lot to do to improve the efficiency of primary energy use. When experts tell us that only 15 per cent of the primary energy reaches its end use and that 70 to 80 per cent is lost along the way, this obviously leaves much room for improvement. This is true not only for the industrialised countries but also the developing countries.

The common global interest to increase the energy available should be based on a diversified and sustainable mix especially those which can ensure humanity with a stream of renewable resources for the future. This effort complements a development strategy that will make an active and dynamic contribution to the economic and social development process during the energy transition.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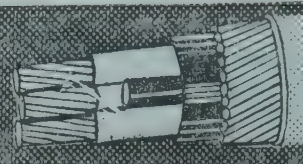

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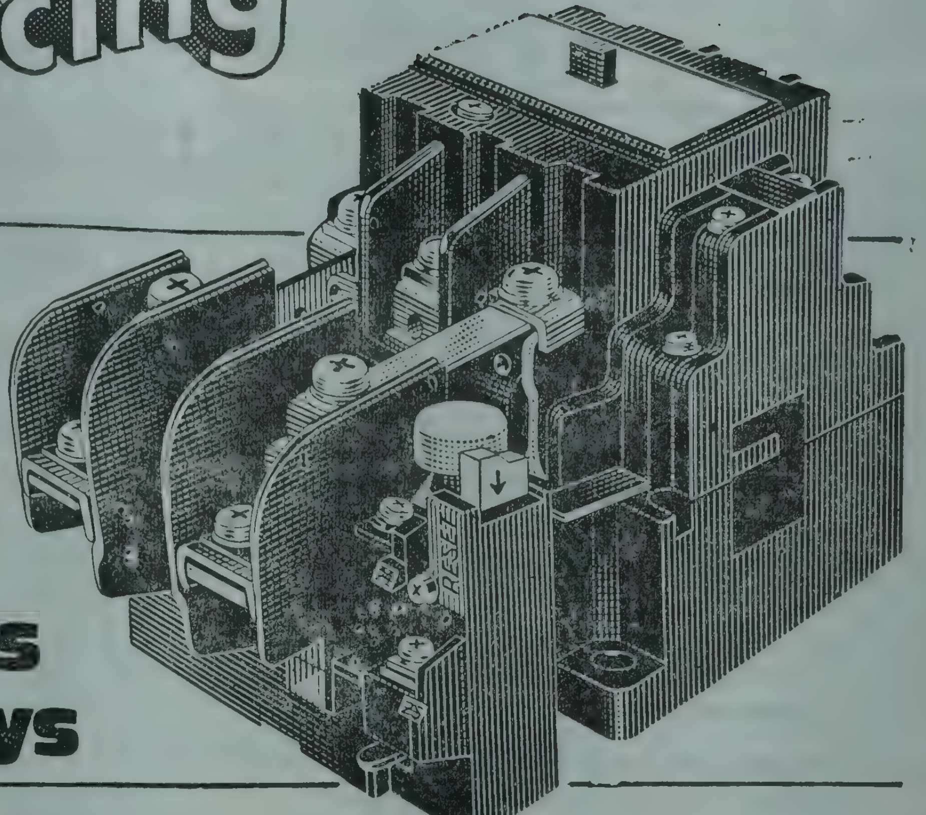

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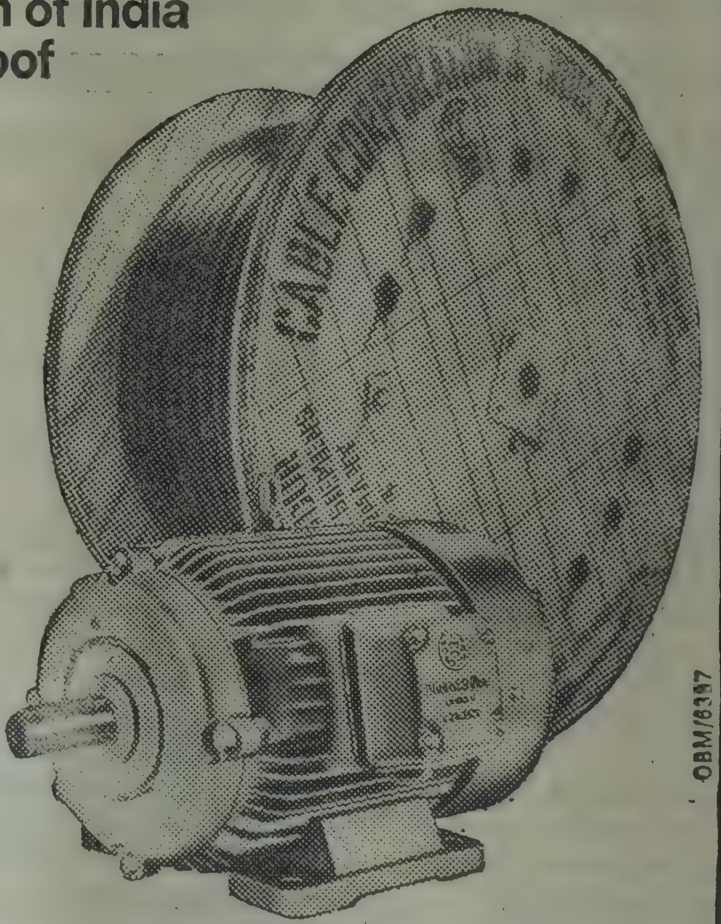

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Special Reports

Reviving coastal shipping

BOMBAY

THE state of coastal shipping in the country today is deplorable, according to Mr R. D. Pradhan, director general of shipping. Addressing a meeting on the subject, he said that this was evident from the state of coastal tonnage, traffic and the state of shipping companies which got themselves engaged in coastal operations. Coastal tonnage in 1961 was 3.38 lakh grt, today it is 1.28 lakh grt. Coastal traffic in 1961 was 33.4 lakh tonnes, today it was less than 10 lakh tonnes. There were 17 companies operating in coastal shipping in 1961, today there were only four. Moreover, all coastal traffic was carried at a loss. The Shipping Corporation of India which carried coal on coastal operations, incurred losses of Rs 119 lakhs on these operations in 1974 and Rs 112 lakhs in 1979-80.

Mr Pradhan said the general feeling was that the present state of coastal traffic was due to deficiencies in the trade structure. That was only one aspect of the problem. The unhappy situation in coastal shipping had arisen from two factors: (i) coastal shipping companies had been deprived of legitimate bulk cargo and (ii) there was an uneconomic trade structure. Unless these basic problems were tackled, it would be futile to contemplate the revival of coastal shipping.

It was worthwhile to consider the revival of coastal shipping since India had such a long coastline. For a variety of reasons coastal shipping had lost in competition with road and rail traffic . The present situation had not arisen because coastal shipping was economically less competitive, but because of the uncompetitive conditions in which it was asked to operate.

Mr Pradhan felt that coal, salt, cement, foodgrains and other bulk commodities should be carried by coastal ships and not by the railways as at present. Under the telescopic freight structure applied to railways, the longer the distance, the lower the freight. Telescopic freight rates could not be applied to shipping. The freight per tonne increased with the length of the journey in the case of coastal shipping. The Food Corporation of India wanted to move foodgrains from Kandla to other ports. When it came to organising this transport, it was found that movement by railways would cost Rs 14.71 per quintal and Rs 60 by ship. As long as the rail freight rates did not reflect the real cost of movement by rail, exporters would prefer to move their goods by rail, Mr Pradhan said. In any case the future of coastal shipping would depend on a policy decision to integrate coastal shipping into the overall transport system of the country. There was also a time lag between the increase in fuel prices and freight rates which had to be bridged.

Discussing the prospects for coastal shipping, Mr Pradhan said that by 1984-85, if bulk commodities like coal, salt, cement and foodgrains were moved by ship, coastal traffic would rise to 73 lakh tonnes and by 1990, it could go up further to 122 lakh tonnes. The core of the movement would be coal and salt. The development of coastal shipping would be directly related to the movement of coal; salt could be carried as return cargo. Coal could dominate cargo and about 27 lakh tonnes of coal and five lakh tonnes of salt could be transported by coastal ships by 1984-85.

Mr Pradhan outlined some of the new perspectives which had come up in coastal shipping. One was that most minor ports in the country today were in disuse. Another was that in certain areas of the country, coastal shipping was the only mode of transport as in Lakshadweep, the Andaman and Nicobar islands. The economies of coastal districts were primarily agricultural. Many coastal districts also had vast mineral reserves. Because of the availability of these rich mineral resources, these districts were ideal for location of extractive industries. Coastal shipping and the use of minor ports was one way in which industrial inputs and outputs to these areas could be moved. Mr Pradhan cited some interesting developments in Gujarat, which had a large number of minor ports. There was a scheme for transporting 6.4 lakh tonnes of clinker between Jaffrabad and Magdala. There was another scheme for carrying 3.4 lakh tonnes of clinker from Jaffrabad to Ratnagiri. There was also considerable scope for increasing traffic between Saurashtra and Kandla by moving chemicals. Similarly, there was scope for increasing traffic between Andhra Pradesh and Tamil Nadu. Rice and fertilisers could be moved from Tuticorin to the Godavari delta of Andhra Pradesh.

Bombay spot exchange rates of leading currencies as on 7-9-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.50	9.70
Austria	A. Schilling	185.00	191.00
Belgium	B. Franc	434	443
Canada	C. $	13.05	13.51
Denmark	D. Kroner	83.20	84.50
France	Franc	63.80	64.90
Hong Kong	H.K. $	65.00	66.90
Italy	Lira	13,360	13,540
Japan	Yen	2510	2560
Malaysia	M. $	25.90	26.70
Netherlands	Guilder	29.40	29.90
Norway	N. Kroner	66.30	67.40
Singapore	S. $	23.70	24.40
Sweden	S. Kronor	57.00	58.00
Switzerland	S. Franc	22.90	23.40
UK	£	5.9960	6.0475
USA	$	10.92	11.12
West Germany	D.M.	26.50	27.00

In the context of these developments, what could be done to make coastal shipping attractive ? According to Mr Pradhan, a package of measures was needed to develop coastal shipping. The time had come when procedures for the revision of freight rates should be revised. A freight rate revisory board should be appointed for the purpose. Similarly the creation of a directorate of coastal shipping was necessary to tie up all cargo movement with shipping companies. On the technical side, a new definition of a home trade ship would have to be found to include ships of less than 300 grt. Moreover, since the problem of customs and documentation was so complex, coastal ships would have to be given green channel treatment. Financial measures would also be needed to attract new investments to coastal shipping. If 57 ships had to be added to achieve the Sixth Five Year Plan target, there was a need for more entrepreneurs. Coastal shipping companies would have to be given the maximum number of loans. Ships over 15 years of age would also have to be allowed to operate on coasts, if some shipping companies operating in international trade wanted to shift to coastal operations.

WOOLLEN GOODS

Export at the cost of domestic consumer?

BOMBAY

THE central theme in the national textile policy insofar as it related to the woollen industry is how to provide cheap woollen cloth to consumers in the country, specially the economically weaker sections, the Textile Commissioner, Mr R. K. Takkar, told members of the Indian Woollen Mills Federation. Yet, most of the organised industry is getting diversified into exports.

Mr Takkar said, the Government did not have a closed mind on licensing further spindleage. It was in the midst of drawing up a policy for units that wanted a capacity of over 2,400 spindles and has decanalised spindleage upto that capacity. This figure was not sacrosanct; if the industry felt the figure was too low, a detailed debate could be held on the subject.

Mr Takkar also emphasised the importance of not placing physical limitations on the use of various fibres by industry. As it is industry had been placed under too many restrictions. He was referring to suggestions made by the federation that restrictions be placed on the use of acrylic and wool by the non-woollen industry. We had to think of ways and means of making industry healthier by not placing restrictions on the use of raw materials by different sections of the textile industry. Acrylic was a new fibre in the textile world and efforts should be made to be true to the multifibre policy. If national priorities required the restricted use of certain fibres, the same could be achieved by fiscal measures, creating tariff barriers rather than placing physical restrictions.

Mr B. K. Kedia, chairman of the Indian Woollen Mills Federation, speaking at the federation's annual general meeting, told the Textile Commissioner that while the decision to liberalise delicensing of worsted and non-worsted spindles up to 2,400 was welcome, this did not help many existing mills. Many good mills were engaged in supplying yarn to the decentralised sectors of hosiery and carpets and in supplying the bulk of the requirements of fabrics and garments meant for domestic trade and exports. The capacity of these mills had been frozen for the past two decades. Today, they had to compete with large resourceful mills from the other textile sectors which had been permitted delicensing up to 50,000 spindles. The federation had, therefore, represented to the Government that all worsted mills should be allowed normal expansion up to 25 per cent of capacity, or up to 4,800 spindles, whichever higher. The non-worsted mills should be allowed expansion up to 25 per cent of capacity, or 2,400 spindles, whichever higher, with the added facility to expand in corresponding loomage. The process of expansion should continue till the woollen mills reached a capacity of 50,000 spindles in line with the other textile sectors.

Speaking about the hurdles in the way of expansion of the woollen industry, Mr Kedia said, the imported machinery required by the industry had become very costly because of inflation in the exporting countries. On top of it there was a 56 per cent duty on imports of such machinery. The federation had asked the Government to place imports of woollen machinery, not available indigenously, under appendix two OGL in the current import policy. This would enable the woollen mills to modernise expeditiously.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on Sept. 1, 1981)

	High	Low	T.T.
Australian $	6.82	6.75	6.9130
Belgian Franc (100)	14.00	13.00	15.005
British £	11.05	10.75	10.985
Burmese Kyat (100)	25.00	15.00	
Canadian $	4.90	4.91	5.0075
French N.F.	0.995	0.975	1.0240
Indian Rupee (100)	58.00	54.00	67.10
West German DM	2.42	2.37	2.4490
Indonesian Rupiah (100)	0.95	0.85	
Italian Lira (100)	4.94	4.60	
Japanese Yen (100)	2.605	2.565	2.5985
Korean Won (100)	0.88	0.78	
Malaysian $	2.51	2.49	2.5480
Netherlands Guilder	2.18	2.13	2.2030
New Zealand $	4.90	4.70	5.0150
Pakistan Rupee (100)	4.30	3.80	6.185
Philippine Peso	0.72	0.695	0.7650
Singapore $	2.76	2.73	2.7885
South African Rand	5.70	5.30	6.3805
Sri Lanka Rs. (100)	30.00	22.00	
Swiss Franc	2.79	2.74	2.7920
Taiwan $ (100)	15.20	15.00	
Thai Baht (10)	27.50	26.30	

It was also necessary to couple expansion of both the worsted and non-worsted sectors with facilities for modernisation of existing production equipment by allowing replacement of old spindles and looms by new spindles and looms on a one to one basis. The extension of IDBI loans at a concessional rate of interest would be very helpful to the industry.

Mr Kedia said, the woollen mills which had been permitted unrestricted use of man-made fibres for diversifying production, were facing serious and unequal competition in their basic line of production of wool/polyester blended goods. The cotton and art silk mills were permitted to use up to 40 per cent wool in their products. As there was delicensing of capacities in these sectors up to 50,000 spindles, the consumption of wool by these sectors had assumed significant proportions. The Federation had represented to the Government that cotton and art silk mills be permitted to use wool to a maximum limit of 10 to 15 per cent.

Another problem faced by the woollen industry was the use of acrylic fibre by large cotton mills. Acrylic fibre was first introduced by the woollen mills for manufacture of hand knitting wool as a substitute for wool. This line had become one of the major activities of many woollen spinning mills till a few years ago when large cotton mills started encroaching on this line of production, pushing the small woollen mills completely out of production. The federation had, therefore, suggested to the Government that acrylic fibre of 2.9 denier and above and staple length of 1½" should be exclusively reserved for use by the woollen industry. Acrylic fibre below 2.9 denier and staple length below 1½" could be used by cotton and art silk mills.

Mr Kedia spoke about the excessive burden of import and excise duty placed on the products of the woollen industry. The duty content of 55/45 polyester/wool fabric had gone up to Rs 26.06 per per metre as against Rs 26.06 per metre for 67/33 polyester/cotton fabric. The parity between these two classes of fabrics finding outlets in the same markets had thus got disturbed, so that woollen products had begun to face severe consumer resistance.

While welcoming the reduction of duty on imported wool from 75 per cent *ad valorem* to 45 per cent *ad valorem*, the federation regretted that the decrease was more than made up by corresponding rise in the duty on tops as well as on fabrics. The federation also pleaded for a uniform rate of duty on all products which would lead to fair competition between the products of different sectors. There was a heavy fabric duty of 17 per cent *ad valorem* imposed on woollen industry products while a duty of 5.5 per cent was imposed on blended/mixed fabrics manufactured by the cotton and art silk sectors. The burden on all products of the woollen industry had been further increased by a flat rise of 5 per cent on the basic duties under the budget proposals for 1981-82.

The federation had also represented to the Government about the high incidence of excise duty of 30 per cent on machine made carpets which, it was pointed out, were not in competition with handmade carpets. It complained that the excise duty granted to IPCL on the manufacture of acrylic fibre had not been passed on to consumers.

The federation had submitted a scheme to the Government under which indigenous combers be permitted to import duty free wool under the advanced licensing scheme and supply duty free wool tops to valid import licence holders, which should be deemed as exports by them. This would give them an equal opportunity to compete with overseas suppliers. The Ministry of Commerce has recently permitted import of duty-free wool tops to exporters under the advance licensing scheme.

Describing the federation's export efforts, Mr Kedia referred to the successful buyer-seller meet held at Moscow International Hotel in June 1981 in which buying organisations from all over the USSR participated. The USSR buyers showed a significant interest in non-traditional Indian woollen products. The organised woollen industry in India is already exporting to USA, Canada, the EEC and West Asian countries.

At this year's meeting, the federation's award for a unique contribution to the cause of the Indian woollen industry was presented to Mr Babubhai Ravjibhai Goradia of the well-known firm of Babubhai Jagjivandas of Bombay.

Mr Botha escalates war

By A SPECIAL CORRESPONDENT

"IF you want peace, prepare for war"—this is the advice South Africa has followed in firing the first shots in a full-scale invasion of Angola and in pulling down the shacks of cardboard and corrugated iron sheets inhabited by black squatters not far from Parliament House in Cape Town. To outsiders, all this may appear singularly ill-timed. The reopening of the South African Parliament has drawn to Cape Town journalists not merely from Pretoria but the outside world. They have flashed to the world pictures of blacks shivering in cold. During these days, there was a visiting party from the United States of nine members of the American Congress. Some of them were moved to tears when they talked to journalists about the plight of the blacks in face of the heartlessness of *apartheid*. That the US legislators lived world apart from the South African law-makers was proved beyond doubt when a Johannesburg newspaper, known for its support for Mr Botha's government, headlined the news story : "Weepy Liberals". The cold winds of this year's severe Cape winter will not bite the homeless Africans so unkindly as will the brutalities and violence affect the Americans who have seen them at first hand. "The government has gone mad": this is the verdict of the Federal Party MP and veteran liberal, Mrs Helen Suzman, on the events in South Africa.

It is unlikely that the South African Government will be moved towards more civilised conduct by opposition at home or criticism abroad. Dr Koornhof, South African Minister for Development, has announced that his government will "not be blackmailed". If anything, there probably is method in Mr Botha's madness. Presenting his post-election budget against the background of developments "in an uncertain and hostile world", the Defence Minister has stepped up defence spending by 30 per cent. This is not the first year of mounting armed preparedness. Defence expenditure has been pushed upwards by 50 per cent over where it stood some three years ago. This is both heroic and self-defeating when unproductive expenditure must stoke the fires of inflation : in 1980 it was 13.8 per cent and this year's estimate is 14.6 per cent. Add to this the fact that the falling price of gold has already reduced the value of this year's output to some two-thirds of the ore mined in 1980. This has more serious implications for South Africa's external accounts. At the end of 1981, the balance of payments must show a substantial deficit, estimated at present of about £ 2,000 million as compared to the 1980 surplus of some £ 1,800 million.

Mr Botha is in no danger nonetheless, of losing his majority of a hundred in the South African Parliament so long as he shows to black Africans an iron fist. In the earlier years of his premiership, he took care to slip the fist occasionally into a velvet glove. Indeed many enemies of *apartheid* must then have felt they found a new friend in a seemingly liberal Botha who too talked of winds of change and asked his supporters to "adapt or die". Recent months have seen him stalling the implementation under UN auspices of international agreement over Namibian independence, although the major western powers were behind UN Resolution 435. His support for "search and destroy" parties to attack guerilla groups allegedly finding a haven in Mozambique must bring its own armed reaction.

Conceivably the latest invasion of Angola is his ruse to internationalise the war by drawing Cuban troops (now in Angola to help protect, among other security zones, the American investments in oil exploration and export). It is too early to say to what extent Mr Botha has felt encouraged by his own interpretation of Mr Reagan's African policies. There is little doubt that South Africa's armed aggression must destabilise the Angolan Government and cause great uneasiness in Zambia and Zimbabwe. If they feel drawn to the increasingly violent struggle of South African blacks for human rights and self-rule, the primary responsibility will be South Africa's, But Mr Botha must have calculated that he is not alone in asserting racial superiority of whites over blacks and in waging on their behalf a last-ditch war. Which are the powers behind the throne of Botha who has deliberately escalated the war against black Africans at home and abroad ?

The controversial Farooq Abdullah

From O. N. KOUL

SRINAGAR

IF the 46-year old eldest son of the Chief Minister, Sheikh Abdullah, Dr Farooq Abdullah, MP, has received an unqualified support from the rank and file of the ruling National Conference of which he was ceremoniously installed as the new president here on August 21, he has also invited adverse comment for his suggestion that the Congress (I) wind up its establishment in Jammu and Kashmir.

However, there is nothing new in this demand. Immediately after returning to power in February 1975, Sheikh Abdullah exchanged several letters with the then state Congress boss, Syed Mir Qasim, on the subject but the latter firmly rejected the idea that the concerned people operate from the common platform of National Conference which was duly revived in 1976. What the Sheikh had in mind and what his son now dutifully appears to think is that the National Conference should regain the status of an associate party it had with the Indian National Congress in and outside the Parliament till the latter inducted its units in to the state, for the first time, in January 1965.

In holding this view, Dr Abdullah does not only believe that his party and the Congress (I) have an identity of ideals but also wonders what considerations govern the latter in opposing a return to the pre-1965 organisational arrangement especially when the late Prime Minister, Mr Jawaharlal Nehru, had categorically stated in his letter of September 20, 1963 to the then State Premier, Bakshi Ghulam Mohammed, that the Congress had been closely associated with the National Conference in Jammu and Kashmir and could not, therefore, encourage any new organisation "even though it called itself the National Congress".

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Sept. 4, 1981 over		
		Sept. 4, 1981	Aug. 28, 1981	Aug. 7, 1981	Sept. 5, 1980	A week ago	A month ago	A year ago
Rice	Average	3.60	3.60	3.50	2.80	—	2.9	28.6
Wheat	Average	3.50	3.50	3.50	2.60	—	—	34.6
Jowar	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Bajra	Average	2.30	2.30	2.20	2.00	—	4.5	15.0
Gram dal	Average	6.50	6.50	6.30	6.00	—	3.2	8.3
Tur dal	Average	6.80	6.80	6.60	5.60	—	3.0	21.4
Potatoes	Average	2.20	2.25	2.40	2.60	—2.2	—8.3	—15.4
Onions	Average	1.80	1.60	1.60	1.00	—12.5	12.5	80.0
Milk per litre	Buffalo	6.00	6.00	6.00	4.40	—	—	36.4
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	6.00	5.80	7.00	10.50	3.4	—14.3	—42.9
Gur	Average	6.60	6.50	6.60	6.50	1.5	—	1.5
Groundnut oil	Average	16.00	16.00	16.00	11.50	—	—	39.1
Vanaspati	Average	15.00	15.00	16.50	—	—	—9.1	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book .. .. (200 pages)	—	2.50	2.50	2.50	—	—	—	—

Dr Abdullah may have adequate reasons to think the way he does. He may also tend to believe that the present Congress (I) leaders have some unfounded suspicions. But, he cannot ignore the fact that the induction of the Congress into the State took place under the guidance and with the approval of Mrs Indira Gandhi who, of all persons, could not be expected to take kindly to a "quit notice" after an interval of 16 years. In any case, Dr Adbullah should have realised that the Congress (I) was the only organised and effective opposition party in and outside the state legislature and as such had a very valuable role to play in the professed democratic order. Fears repeatedly expressed by Sheikh Abdullah in recent months in the wake of an aggressive campaign against him by Congress (I) leaders, including Mrs Gandhi, that the ruling party at the Centre was out to dislodge him by fair or foul means were allayed by the Prime Minister herself here recently when, in fact, she defused the situation in favour of the National Conference at the cost of the morale of her own partymen. Not that the state Congress(I) leaders have given up their mistrust of the Sheikh. But, they assert that they are the only link with the Centre in the prevailing circumstances and have, therefore, an aditional responsibility of being truly functional in Jammu and Kashmir.

It is difficult to believe that Dr Abdullah did not expect the criticism that has come for his anti-Congress suggestion. That he did not refrain from doing so is explained by some observers by pointing out that the National Conference has the chronic habit of taking extreme positions, as and when necessary, to rouse sentiments. According to these observers, in saying what he did, Dr Abdullah projected himself as bold as his father in taking a stance which smacked of resisting New Delhi. They add that the stance could be deliberate in the context of general belief that assembly election will be held in the state next year instead of the scheduled date of June 1983. Does it, therefore, mean that Dr Abdullah's statement was meant only for local consumption? If so, will not the same hold good for the critical references made earlier by the Sheikh himself to the Centre on the issue of granting permission to the residents of occupied Kashmir to visit this side and vice versa?

However, if it is chronic with the National Conference to take extreme positions, its attitude towards the press is pathetic. Addressing the party delegates on August 23, Dr Abdullah expressed satisfaction at the coverage given to the speeches delivered by him and his father on August 21 but took strong exception to "miserly treatment" given to the 7-km presidential procession taken out earlier on that very day. "The tide makes no distinction. It will sweep you away", he roared at the newsmen. There is no doubt that the procession was spectacular. Equally spectacular were the illuminations and the fireworks which preceded and continued till the National Conference-annual session ended. Was the press expected to fill columns about it by, say, comparing it with the recent royal wedding celebrations in London? Dr Abdullah should be grateful if the press did not point out that the people's involvement in his presidential procession was not as impressive and widespread as was the case in the 1977 mid-term election or earlier in 1975 when Sheikh Abdullah visited the valley immediately after assuming the office of Chief Minister in Jammu in terms of the Kashmir Accord. The people concerned had better realise that it is one thing to ask press to be fair and constructive and absolutely another to tell newsmen, directly or indirectly, what they should write.

What exactly he does will be known only with the passage of time. But Dr Adbullah, a young man of excellent manners, tall, fair and handsome, enjoying the patronage of his illustrious father, the unchallenged leader of the state people, should be expected to cure whatever is known to be chronic and pathetic about his party.

FICCI pleads for higher growth

MADRAS

THE executive committee of the standing advisory committee of the Federation of Indian Chambers of Commerce and Industry (FICCI) met here last week under the chairmanship of its president, Mr Arvind N. Lalbhai. Meetings of the sub-committees of taxation, foreign trade, internal trade, energy and rural development were also held.

The committee noted with satisfaction that the economic situation, particularly since the last one year had significantly improved due to efforts made by the Government in major areas like power generation, and coal production and movement. Industrial production, on current indication, is increasing at the rate of 10 per cent per year. The committee hoped that this growth will be maintained. It, however, feared that a section of industry may be forced into sickness for lack of adequate working capital and it is imperative that credit

As I see it

Small industry "promotion"

IT is the policy of the Government of India to promote the development of small scale industries. The normal expectation under the circumstances would be that the public sector undertakings would be actively involved in the effort to help the growth of the small scale industries. The facts do not, unfortunately, stand up to this expectation. Many of the public sector undertakings are found to be lukewarm to the small scale units inspite of the number of guidelines issued by the Bureau of Public Enterprises in the Union Ministry of Finance. Indeed in nearly 30 out of the 100 public sector undertakings, which have scope for ancillarisation, plant level committees for ancillary development programmes have not been set up. The complaints have been voiced that many of the public sector undertakings suddenly change specifications and do not place orders for their requirements, often delay in inspecting the products and the payment of the bills for supplies made by the small scale units.

During 1979-80, 66 manufacturing public sector enterprises procured from the small scale unit items worth Rs 119 crores—less than ten per cent of the outside purchases by these public sector undertakings. It would not be correct to put the entire blame for the low purchases from the ancillaries on the public sector undertakings in the absence of any study on the range of items that can be purchased by them from the small scale sector. Between 1975-76 and 1979-80 the number of ancillaries serving the public sector enterprises went up from 479 to 888 and the value of purchases by the public sector enterprises from the ancillaries registered an almost fourfold increase.

The Government has been a silent spectator to the undercutting of the small scale units by the large manufacturers in more ways than one. In some cases the large manufacturers charge relatively higher prices from the small scale units on raw materials and intermediary products purchased by the latter. This is done to reduce the price competitiveness of the products of the small scale sector. In other cases the large units adopt the practice of undercutting the prices of small scale units to push them out of the market.

The Small Industries Service Institutes (SISIs) maintain 16 exchanges for the purpose of effecting linkages between small scale units and large and medium undertakings in the matter of subcontracting of part of the job undertaken by the latter. The functioning of these exchanges leaves much to be desired. During 1979-80 no subcontracting was arranged by the exchanges at Jaipur and Srinagar, while that in Patna handled business worth only Rs 38,000 and that in Madras business worth just Rs 44,000. The fact is that only a small number (8,100 units out of a total of over eight lakh small scale units) in the country are registered with these exchanges.

Nearly 843 items have been "reserved" to be produced by the small scale sector exclusively. In practice many of the so-called "reserved" items are still being produced by the large units including multinational companies. Toothpaste was reserved for the small scale sector in 1970. Notwithstanding such reservation nine organised sector units with the total approved capacity of 3,927 tonnes had increased their production of toothpaste to 9,400 tonnes by the end of 1978. Just the opposite was the picture in the small scale units numbering nine whose production in 1978 was just 740 tonnes—less than one sixth of their installed capacity of 4,700 tonnes! This is how "reservation" operates in relation to the small scale units.

Subhash Chandra Sarker

Money

Much delayed cheque realisation

THE amount of troubles that large companies and corporations face regarding their local and outstation cheques deposited with banks are immense. Everyone knows by this time that realisation of cheques takes a long time in banks. Even local clearing cheques take a long time. Neither drawers nor payees have an assurance that their cheques will be paid or collected within the expected time range. In metropolitan cities like Bombay or Calcutta even local clearing cheques take three to four days if both the banks are concerned in suburbs. Banks receive clearing cheques for payments late in the evening and often they keep them pending till the next morning before passing. Very often cheques are turned long past the return time. Above all, the collecting banks take weeks to send back to the depositor cheques returned through clearing.

Thus by the time a depositor receives back the cheque deposited by him in his bank, it is usually 15 days. Most of the time, collecting banks do not read the objection memos and do not represent the cheques even if the paying banker has specifically stated "effects not cleared", or "present again".

It has been usual with most customers not to sign the cheques and with most bankers to certify "payees account will be credited". Often the customers forget or fail to sign and the bankers fail to give the stamped certificate. Recent modifications in clearing house rules provide that even if there is no specific certificate to that effect, the clearing stamp of the bank will be tantamount to such a certificate. Yet many bankers return clearing cheques with such technical objections.

These are the problems which most customers face in one way or another, at one end or another. But these problems are compounded hundredfold where the customer is another bank or financial institution, which has given loans and which has to credit the cheques to the loan accounts of their customers. They find that there is no finality about realisation of cheques deposited in a bank for clearing purposes. They, therefore, go to another extreme of withholding credits to their borrowers for 15 to 25 days, until they are absolutely certain that a clearing cheque can no longer come back now !

Not only others, even banks themselves follow this practice. Give a clearing cheque to a bank for payment to government; it will ask for a "cooling" period of 10 days before the receipted *challan* is issued. The entire automaticity in the clearing operations of the banks, and the time discipline in their clearing operations have been lost or replaced by problems, delays and indifference. No one, not even banks rely on the results of their own clearing. Whatever may be the sophistications introduced in banking services, in this elementary task of clearing cheques, banks are not reliable or accurate.

If this is the state of affairs in clearing of cheques, the problems are worse in outstation collection of cheques and bills. The realisation advices do not come, even if they are received, they are not credited, and even where they are credited, the credit advices are not issued.

In cases of financial institutions which have to give credit to their customers' loan accounts, such uncertainty about outstation cheques for months together is very damaging. Since they do not know which of their cheques are realised and which are not, they are unable to give to their own borrowers a clear picture of their own ledger accounts. And the troubles continue at all levels. Pharmaceutical and consumer goods companies cannot credit their depots and sales dealers and cannot supply goods. Money and balances are locked up at all stages and in all offices. And such lock-ups go to raise the cost of money to all, including consumers.

S. G. Shah

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needs of industry be maintained to keep production expanding.

It is the considered view of the committee that a number of commodities are currently imported at considerably higher prices than the domestic cost of production. In fertilisers, the domestic price is half that of import price, in cement only a little above one-third, and in paper about 40 per cent. Import of these and other commodities such as edible oils, iron and steel, aluminium, synthetic fibres and chemicals would cost Rs 2,500 crores. These could be indigenously produced and the import bill reduced to that extent. In fact, many of these may be good export items. Self sufficiency in these commodities could be achieved through investment of Rs 3,400 crores. Unless this is done India's trade prospects would remain bleak.

The committee urged that the time involved in the implementation of projects should be cut down drastically and investment be made attractive enough. The time taken for clearance of applications for industrial licences, MRTP approval, issue of import licences and sanction of loans by financial institutions was quite long. To reduce the delay, Government should create a "single window facility" which would take a final decision on all these aspects.

While pleading that investment be made really attractive, the FICCI pointed out that in many of the controlled industries, the level of prices did not permit a return of 15 per cent which is the interest industry had to pay on its borrowing from financial institutions. Moreover, the escalation of cost of new projects due to inflation made it impossible for them to compete with established industries. This handicap could be removed by reintroducing the excise duty rebate scheme which was in operation during 1976-79. The committee appreciated the Government's decision to revise cement prices.

The committee felt that the present system of depreciation based on historical cost made it impossible for companies to replace worn-out plant and machinery and often lad to industrial sickness. It was, therefore, suggested that the retention of resources through depreciation and other facilities like investment allowance should be such as to bring up the resources to match replacement value of plant and machinery.

The FICCI decided to organise a workshop on tourism in Delhi on September 30. It will be inaugurated by Union Minister for Transport and Tourism, Mr A. P. Sharma.

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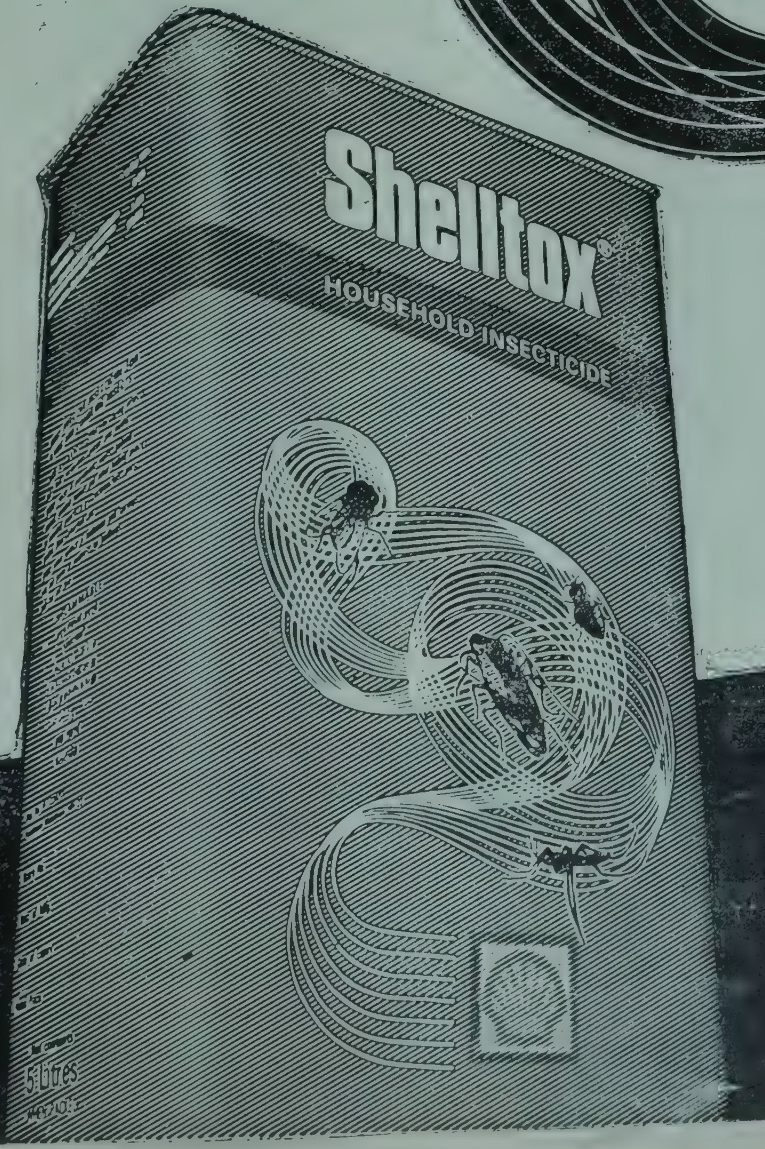

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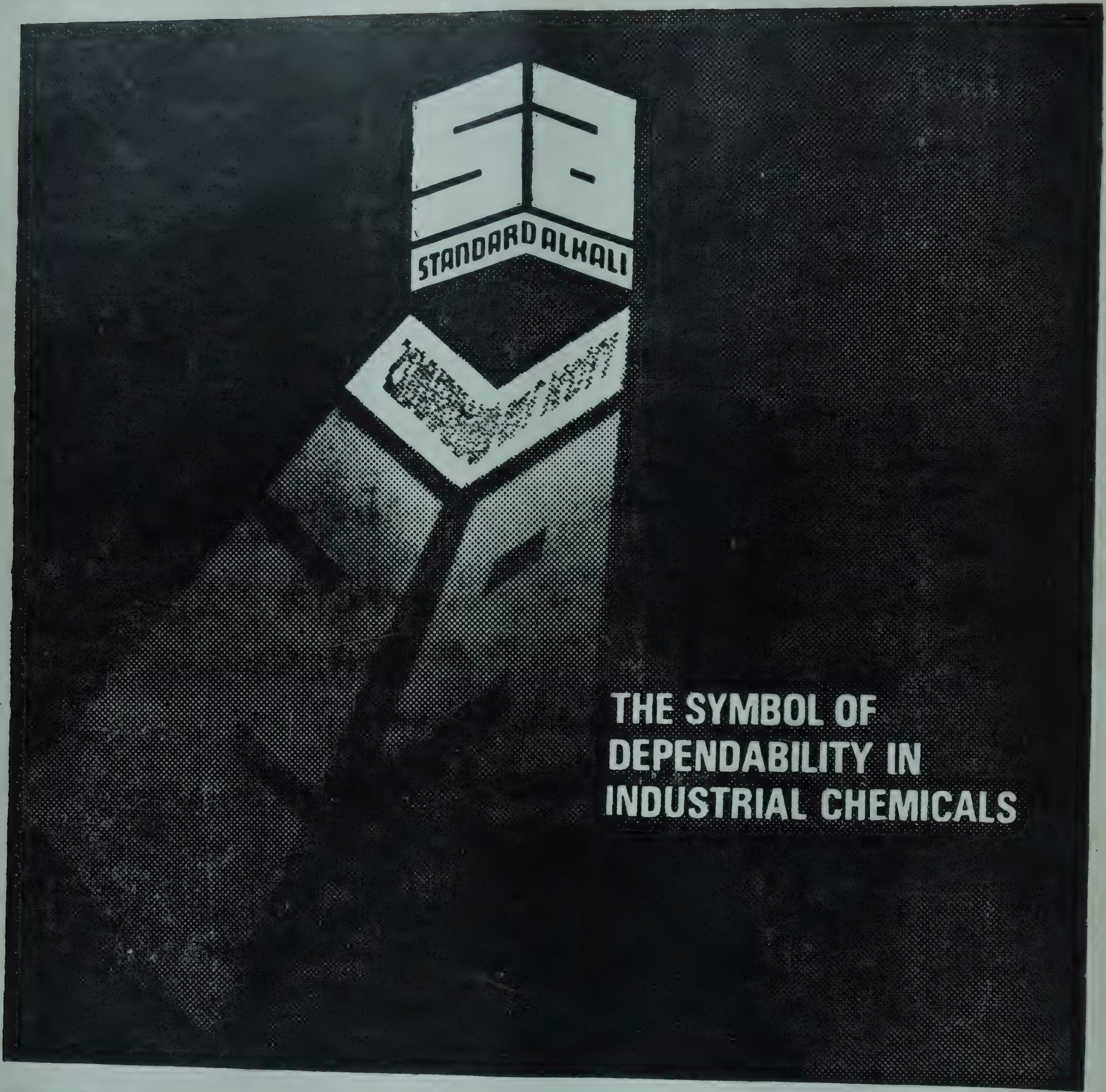

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INDO-AUSTRALIAN TRADE

Exploring new areas

BOMBAY

POLITICAL and traditional links between India and Australia are close, but trade links are poor, Mr J. B. Gough, leader of a high powered seven-member Australian delegation to India told members of the Bombay Chamber of Commerce and Industry. Only one per cent of Australia's exports come to India, and only one per cent of its imports of Rs 180 billion come from India.

The Australian Trade Development Council survey mission has, therefore, come to India in the wake of the Australian Prime Minister, Mr Malcolm Frazer's recent visit to this country to explore possibilities of stepping up trade between the two countries.

Mr Gough described some of the advantages of trade with Australia. About 70 per cent of Australia's imports went in duty free 20 per cent at duty rates up to 30 per cent and the final 10 per cent was protected. The Australian Government had embarked on a plan of reducing tariffs in the last decade, when it reduced tariffs by 30 per cent. Only some items like clothing, footwear and textiles were placed under protection and that might affect trade with India. But developing countries were given a preference of 10 per cent. The 10 per cent preference, however, was not allowed if products reached 15 per cent of the import market. This meant that India's competitors like Taiwan and South Korea would probably not get the 10 per cent preference.

Mr Gough expressed the delegation's tremendous desire to find an Indian manufacturer willing to export a product to Australia which would find credibility in the market. India today was what Japan was 25 years ago. A number of goods like textiles, automobiles and sports articles like wooden tennis rackets and hockey sticks could be exported to Australia. Australia was a highly competitive and fashion conscious market. If the market there could be captured, it would be a wonderful passport to enter the US market. The Japanese experimented with the Australian market before penetrating the US market he pointed out.

It was clear that the Australians did not know much about India nor Indians about Australia. The latter could only learn about Australia by sending entrepreneurs to visit the country.

Continued on page 484

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	Aug. 15 1981	Aug. 8 1981	July 18 1981	Aug. 16 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	276.4	275.5	273.8	264.4	0.3	0.9	4.5	28.1
Primary articles	272.6	272.6	269.4	236 7	—	1.2	15.2	29 6
Fuel, power, lubricants etc.	428.8	428.7	427.4	355.7	—	0.3	20 6	44.0
All commodities	287.7	287.2	285.0	260.6	0.2	0.9	10 4	30 5

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	Aug. 21 1981	Aug. 14 1981	July 21 1981	Aug. 22 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,097	58,593	58,051	49,211	—0.8	0.1	18.1	36 8
Bank credit	26,822	26,775	26,778	21,982	0.2	0.2	22 0	36 8
Aggregate deposits ..	40,764	40,708	40,578	33,837	0 2	0.5	20.5	40 3
Foreign exchange reserves(a)	4,329	4,891	4,856	5,836	—11.5	—10.9	—25.8	—23.8

MONTHLY INDICATORS

	Latest month				Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month		Amount/ Index			
Industrial production (crude Index)	1970=100	July	1981	151.7(a)	145.5 (a)	4.3	14 6
Exports	Rs. crores	May	1981	383	627	—38.2	—15 7
Imports	Rs crores	May	1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May	1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	July	1981	4,856	4,856	—	—6.7
Wholesale price Index ..	1970-71=100	July	1981	283.7	278.7	1.8	13.6
Consumer price Index for Industrial workers ..	1960=100	June	1981	439	433	1.4	13.6
Unemployment(d)	Lakhs	Feb	1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110,9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3.3	14.9
Imports	Rs crores	12,210	8,908	2,955	37.1	22.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b) .*	Rs crores	55,221	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.8	217.6	139.7	18.0	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	lakhs	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

CORPORATE SECTOR

In the market

Uptron Electronic Devices

Uptron Electronic Devices Ltd (Registered office: 64/2, Site IV, UPSIDC Industrial Estate, Sahibabad-201 005, District Ghaziabad, Uttar Pradesh) is offering for public subscription at par 4.90 lakh equity shares of Rs 10 each totalling Rs 49 lakhs. The subscription list will open on September 16 and close on September 26 or earlier but not before September 18.

The company, incorporated in October 1979, is setting up a project at Sahibabad for the manufacture of 1.85 million each of aluminium electrolytic capacitors and polystyrene capacitors per annum. The trial runs are scheduled to be made in November 1981 and commercial production shortly thereafter. The total cost of the project is estimated at Rs 2.54 crores which will be financed by equity share capital of Rs one crore, term loans of Rs 1.46 crores and unsecured loans of Rs 8 lakhs from private Indian promoters.

Uptron Electronic Devices Ltd is a joint venture of Uttar Pradesh Electronics Corporation Ltd, L. M. Ericsson Telephone Company, Sweden, and Messrs S. R. Jiwarajka and P. Obul Reddy and their associates.

Morarjee Goculdas

The Morarjee Goculdas Spg & Wvg Co Ltd, Dr Ambedkar Road, Parel, Bombay-400 012, is offering for public subscription at par 2.50 lakh 13.5 per cent secured debentures of Rs 100 each totalling Rs 2.50 crores. The subscription list will open on September 14 and close on September 24 or earlier but not before September 16. The company, incorporated in August 1871 for the manufacture of textile goods, wishes to augment its resources through the debenture issue.

Kirloskar Brothers

Kirloskar Brothers Ltd (Registered office : Udyog Bhavan, Tilak Road, Pune-411 002) is offering for public subscription at par 1.50 lakh 13.5 per cent secured redeemable debentures of Rs 100 each totalling Rs 1.50 crores. The subscription list will open on September 14 and close on September 24 or earlier but not before September 18. The company was incorporated in January 1920 for the manufacture of agricultural implements and machinery. The object of the present issue is to augment the resources of the company.

Tristar Concrete Industries

Tristar Concrete Industries Ltd (Registered office : 231/H, Rai Bahadur Road, Calcutta-700 034) is offering for public subscription at par 2.10 lakh equity shares of Rs 10 each totalling Rs 21 lakhs. The subscription, which opened on September 11, will close on September 26 or earlier but not before September 15. The company was incorporated as a public limited company in May 1981 for manufacture and trading of RCC Spun pipes and concrete products.

Other developments

GIIC: Hotel project in Baroda

Gujarat Industrial and Investment Corporation Ltd has signed an agreement with Mr Mahendra Patel of GEAP Group, a company based in United Arab Emirates which has its business interests in other parts of the world as well, for setting up a hotel and housing project in the joint sector in Baroda city.

The estimated outlay for the hotel project would be about Rs 3 crores although the details in respect of the exact number of rooms and types of facilities to be provided are being worked out. The hotel will be located at RC Dutt Road, Baroda. The housing project envisages construction of 600 luxury flats for non-resident Indians in Alkapuri, Baroda. Each flat is estimated to cost Rs 6 lakhs which will have to be bought against the payment in foreign exchange. The implementation of the projects will commence shortly.

Kunal Engineering: Expansion apace

Kunal Engineering Ltd has reported higher turnover for the year ended March 1981 at Rs 5.85 crores compared to Rs 3.97 crores in the previous year. The net profit, after providing Rs 20.82 lakhs (Rs 15.72 lakhs) for interest payments and Rs 24.06 lakhs (Rs 16.78 lakhs) for depreciation, was Rs 48.69 lakhs (Rs 52.83 lakhs). The equity dividend recommended for the year under review is 24 per cent (20 per cent). An amount of Rs 12.16 lakhs (Rs 27.72 lakhs) is tranferred to investment allowance reserve and Rs 16.68 lakhs (Rs 2 lakhs) to general reserve. Production of spindles during the year under review was 7.15 lakhs numbers (6.29 lakh numbers) and that of inserts was 4.36 lakh numbers (30,000 numbers). Expansio project for spindles and inserts to 9 lak numbers each per annum is progressin well.

Laxmi Starch steps up

Sales of Laxmi Starch Ltd for th year ended March 1981 increased to R 15.37 crores from Rs 10.30 crores in th previous year. The net profit, after pro viding Rs 20.42 lakhs (Rs 19.76 lakhs for depreciation and Rs 49 lakhs (Rs 1 lakhs) for taxation, amounted to R 29.66 lakhs (Rs 20.93 lakhs). The equit dividend recommended for the year under review is 15 per cent (12 per cent) An amount of Rs 1.70 lakhs (Rs 2.5 lakhs) is transferred to investment allowance reserve and Rs 15.92 lakhs (Rs 12.5 lakhs) to general reserve.

Enfield India : Losses cut

Enfield India Ltd has reported higher turnover for the year ended June 1981 at Rs 31.95 crores compared to Rs 22.97 crores in the previous year. The net profit, after providing Rs 1.12 crores (Rs 1.10 crores) for finance charges and Rs 28.05 lakhs (Rs 25.76 lakhs) for depreciation, was Rs 1.32 crores (Rs 71.14 lakhs). The accumulated losses has been brought down to Rs 66.81 lakhs from Rs 2.05 crores in the previous year. The accumulated losses stood at Rs 3.58 crores at the end of 1977-78. Output of bullet motorcycles during the year under review was 19,512 units (16,180 units) and that of mini-bullet motorcycles was 4,866 units (2,682 units). The modernisation programme is estimated to cost Rs 2.87 crores which will be financed by term loans of Rs 2 crores and Rs 87 lakhs from internal resources.

L & T : Ambitious diversification

Larsen and Toubro Ltd will invest an additional Rs 200 crores in a cement plant, shipping and further expansion of its activities. Disclosing the company's future plans at a press conference, the chairman, Mr N. M. Desai, said L & T was also thinking of taking up projects such as caustic soda, metallurgy and sponge iron.

There will be a capital investment of about Rs 80 crores in the cement plant with a licensed capacity of 1.1 million tonnes and likely to be commissioned by February 1983. For its shipping business, L & T will acquire four bulk carriers — one next month and the second in January 1982, both being second hand. Early in 1982, the company plans to place orders on overseas hipyards for the remaining two ships. It has also applied to the Monopolies and Restrictive Trade Practices Commission for clearance of the proposal to acquire bulk carriers totalling 180,000 dwt. The capital outlay is expected to be Rs 70 crores.

The company has had higher profitability this year due to better capacity utilisation ranging from 70 to 95 per cent for most units resulting in better productivity. Sales for the first four months ending July 31, 1981 totalled Rs 54 crores against Rs 36.54 crores during the corresponding period for the previous year. Production rose to Rs 42.78 crores from Rs 29.10 crores. Order booking as on July 31, 1981 was Rs 77.61 crores compared to Rs 41.58 crores a year ago. Order backlog is Rs 155 crores compared to Rs 117 crores for the previous year.

L & T will soon have a Bahrain subsidiary. The company will be formed on a joint venture basis with Consolidated Contractors International Company Limited (CCICL) Liberia, which will hold 25 per cent of the total share capital of Rs 100 lakhs. CCICL is a leading construction and engineering company operating in the Middle East. The L & T subsidiary, Engineering Construction Corporation (ECC) is, together with CCICL, executing a contract for mechanical equipment erection and piping works for the crude process unit in Zirku, UAE. ECC has also secured a large order valued at Rs 40 crores from Iraq for the construction of police headquarters in Baghdad. ECC is executing two earlier contracts in Iraq, together valued at Rs 26 crores. The total value of overseas orders including orders from Abu Dhabi and Sri Lanka currently under execution by ECC stands at Rs 6 crores.

LM-Maneklal: Good export erformance

Sales and other income of SLM-Maneklal Industries Ltd for the year nded March 1981 increased to Rs 23.11 crores from Rs 19.80 crores in the previous year. The net profit, after providing Rs 48.09 lakhs (Rs 46.44 lakhs) for depreciation and Rs 17.60 lakhs (Rs 3.75 lakhs) for taxation, amounted to s 66.47 lakhs (Rs 69.75 lakhs). The quity dividend recommended for the ear under review is 14 per cent. An mount of Rs 25.68 lakhs (Rs 18.02 lakhs) is transferred to investment allowance reserve and Rs 3 lakhs (Rs 13 lakhs) general reserve. Exports during the ear under review were Rs 1.04 crores s 40.19 lakhs). The company has on and export orders for over Rs 1.60 crores. The plant for the manufacture of high pressure rubber hoses at Kalol, Panchmahals District, Gujarat, in technical collaboration with Tecalemit Flexibles, France, has been successfully commissioned in March 1981. The company, along with the Standard Mills Co Ltd, Bombay, is participating in a joint venture project being set up in Indonesia for the manufacture of cots and aprons for the textile industry and other rubber products.

Gwalior Rayon recommends 20 per cent

The Gwalior Rayon Silk Mfg (Wvg) Company Ltd has reported a higher turnover for the year ended March 1981 at Rs 295 crores compared to Rs 247 crores in the previous year. The net profit, after providing Rs 7.92 crores (Rs 7.42 crores) for depreciation and Rs 7.38 crores (Rs 6.83 crores) for taxation, was Rs 9.15 crores (Rs 7.17 crores). The equity dividend recom-

Tuticorin Alkali Chemicals plant nearing completion

Tuticorin Alkali Chemicals and Fertilisers Ltd, a joint sector project sponsored by Tamil Nadu Industrial Development Corporation Ltd (TIDCO) is fast taking shape at Mullakadu village, near Tuticorin, in Tamil Nadu for the manufacture of soda ash (a basic chemical) and ammonium chloride (a nitrogenous fertiliser). The plant will have an installed capacity of 66,000 tonnes of soda ash and 66,000 tonnes of ammonium chloride per annum. Construction work had started in June 1979 and the plant is expected to go on stream in early 1982.

TAC has entered into a contract with Hitachi Shipbuilding and Engineering Company Limited, Japan, popularly known as Hitachi Zosen, for the supply of process know-how, design and detailed engineering of the project, apart from supply of machinery and equipment, all valued 2,169 million yen (Rs 8.58 crores).

The cost of the project is Rs 53.20 crores which is proposed to be met by equity share capital of Rs 13 crores and Rs 40.20 crores by way of loans from financial institutions. TIDCO's participation in equity share capital will be Rs 643 lakhs, SPIC's Rs 20 lakhs and the balance of Rs 6.37 crores would be offered to the public.

Current production of nitrogenous fertiliser in India is 2.20 million tonnes as against a demand of 3.50 million tonnes. Projections for 1984-85 are for six million tonnes and a supply of 4.20 million tonnes.

Construction work in progress at the TAC project site.

mended for the year under review is 20 per cent. An amount of Rs 1.98 crores (Rs 1.45 crores) is transferred to investment allowance reserve. Production of pulp during the year under review was 97,797 tonnes and that of caustic soda was 39,536 tonnes. The turnover of Bhiwani Textiles during the year under review increased to Rs 28 crores from Rs 22 crores in the previous year. During the year under review, the company exported goods worth Rs 1.10 crores comprising chemicals, machinery, etc.

Piramal Steel: Increased sales

Sales turnover and other receipts of Piramal Steel Ltd for the year ended April 1981 increased to Rs 6.01 crores from Rs 3.73 crores in the previous year. The net profit, after providing Rs 6.95 lakhs (Rs 5.65 lakhs) for depreciation, was Rs 32.90 lakhs (Rs 32.08 lakhs). The equity dividend recommended for the year under review is 10 per cent. An amount of Rs 2.50 lakhs (Rs 0.33 lakh) is transferred to investment allowance reserve.

The company proposes to establish a sophisticated rolling mill for which the requisite letter of intent had been obtained. The first phase of the project is likely to be completed during the latter half of 1982.

Investment Corporation: Increased income

The Investment Corporation of India Ltd has reported higher gross income for the year ended March 1981 at Rs 1.08 crores compared to Rs 1.07 crores in the previous year. The net profit, after providing Rs 20.24 lakhs (Rs 9.80 lakhs) for taxation, was Rs 52.96 lakhs (Rs 66.73 lakhs). The equity dividend recommended for the year under review is 20 per cent (same). An amount of Rs 55 lakhs (Rs 5.10 lakhs) is transferred to general reserve.

HDFC's maiden dividend

Housing Development Finance Corporation Ltd has made considerable progress during the year ended June 1981. Total loan approvals have exceeded Rs 61 crores for 24,000 homes in 185 towns and cities throughout the country. The net profit, after providing Rs 53.75 lakhs for taxation, was Rs 1.14 crores. The company has declared a maiden dividend of 5 per cent for the year under review. Dnring the year under review, the company approved loans totalling Rs 31 crores and disbursed Rs 22 crores.

Indian Explosives: Turnover up

Indian Explosives, a fertiliser and blasting explosives company, has earned a turnover of Rs 62.32 crores during the first six months of the year ending September 1981 compared with Rs 37.03 crores during the same period the previous year. It is interesting to note that during the year ended September 30, 1980, the company's sales totalled Rs 68.15 crores.

The estimated trading profit for the half year comes to as much as Rs 7.41 crores, as against Rs 3.05 crores during the corresponding half year of the previous working year and only Rs 2.13 crores for the whole of the working year ended last September. A record rise in the sales of fertilisers to Rs 41.37 crores against Rs 20.02 crores and Rs 30.05 crores for a full working year ended September 1980, has contributed to the spectacular rise in the sales for the half year under review. The company's fertiliser expansion project which increases the existing capacity by 50 per cent was completed in record time.

Despite this excellent performance, the company has not declared an interim dividend, and also despite the fact that tax allowances like depreciation and investment allowances available for the fertiliser expansion project take the entire tax liability away. The company is really worried by the increase in the interest burden on account of heavy working capital borrowings.

Tata Oil Mills: Bonus issue proposed

The Tata Oil Mills Company Ltd has reported higher income for the year ended March 1981 at Rs 150.54 crores compared to Rs 105.95 crores in the previous year. The net profit, after providing Rs 4.54 crores (Rs 3.01 crores) for interest payments, Rs 1.19 crores (Rs 1.14 crores) for depreciation and Rs 2.37 crores (Rs 1.81 crores) for taxation, amounted to Rs 2.40 crores (Rs 1.52 crores). The equity dividend recommended for the year under review is 20 per cent (same). An amount of Rs 17 lakhs (Rs 12 lakhs) is transferred to investment allowance reserve and Rs 1.23 crores (Rs 46.87 lakhs) to general reserve. The company proposes to issue 1:5 bonus shares subject to necessary approvals. The bond-holders who have opted to convert the convertible part of the bonds into ordinary shares will also participate in the bonus issue.

Forthcoming company meetings

SEPTEMBER 12 TO SEPTEMBER 18

Gujchem Distillers India Ltd, Sheth Shri A. H. Memorial Hall, Gujarat Chamber of Commerce Premises Near Natraj Theatre, Ashram Road Ahmedabad-380 009. (*September* 12 10 *a.m.*)

Hindustan Ferodo Ltd, Gateway Room, Taj Mahal Hotel, Apollo Bunder, Bombay-400 039. (*September* 14 4.30 *p.m.*)

Tata Oil Mills Company Ltd Birla Matushri Sabhagar, 19, Sir Vithaldas Thackersey Marg, Bombay-400 020 (*September* 15, 4 *p.m.*)

Russel Construction Company Ltd, 1/A, Vansittart Row, Calcutta 700 001. (*September* 15, 4.30 *p.m.*)

Indian Dyestuff Industries Ltd Ballroom, Taj Mahal Hotel, Apollo Bunder, Bombay-400039. (*September* 16, 4 *p.m.*)

Sirdar Carbonic Acid Gas Company Ltd, 16, Bombay Samachar Marg Fort, Bombay-400 023. (*September* 17 3.30 *p.m.*)

Colour-Chem Ltd, Patkar Hall SNDT Women's University, 1, Nathiba Thackersey Road, Bombay-400 020 (*September* 17, 4.30 *p.m.*)

Ahmedabad Advance Mills Ltd Bombay House, 24, Homi Mody Street Bombay-400 023. (*September* 17 4 *p.m.*)

Hukumchand Jute Mills Ltd 15, India Exchange Place, Calcutta 700 001, (*September* 17, 3 *p.m.*)

Ahmedabad Electricity Company Ltd, Bhaikaka Bhavan, Law College Road, Near Law Gardens, Ellis Bridge Ahmedabad-380 006. (*September* 18 9.30 *a.m.*)

Piramal Steel Ltd, Indian Merchants Chamber Hall, 76, Veer Nariman Road, Churchgate, Bombay-400 020 (*September* 18, 4 *p.m.*)

Khandesh Spinning & Weaving Mills Company Ltd, Station Road Jalgaon-425 001. (*September* 18, 3 *p.m.*)

Investa Ltd, Conference Room Bombay House, 24, Homi Mody Street Fort, Bombay-400 023. (*September* 18 11.30 *a.m.*)

Jaipur Udyog Ltd, Officers Club Hall, Sawaimadhopur, Rajasthan (*September* 18, 10 *a.m.*)

Rajapalayam Mills Ltd, Ramamandiram, Tenkasi Road, Rajapalayam (T.N.). (*September* 18, 10 *a.m.*)

Mim Tea Company Ltd, 8, Clive Row, Calcutta-700 001. (*September* 18 11.30 *a.m.*)

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Bombay Dyeing & Mfg. Company		Century Spg. & Mfg. Company		Mafatlal Fine Spg. & Mfg. Company		Mafatlal Industries		Standard Mills Company	
Industry Group	Cotton textiles		Cotton textiles		Cotton textiles		Cotton textiles		Cotton textiles	
	Year ended March		Year ended December		Year ended March		Year ended March		Year ended March	
Item	1980	1981	1979	1980	1980	1981	1980	1981	1980	1981
Liabilities (at the end of the year)										
1. Net worth (i+ii)	2,614.4	2,970.3	8,048.4	9,301.9	1,630.0	1,821.2	2,387.1	2,764.4	2,657.9	3,161.7
(i) Paid-up capital (a+b)	1,040.9	1,040.9	1,064.7	1,597.0	515.0	677.0	810.0	810.0	658.8	658.8
(a) Equity	1,040.9	1,040.9	1,064.7	1,597.0	486.0	648.0	810.0	810.0	646.8	646.8
(b) Preference	—	—	—	—	29.0	29.0	—	—	12.0	12.0
(ii) Reserves	1,573.5	1,929.4	6,983.7	7,704.9	1,115.0	1,144.2	1,577.1	1,954.4	1,999.1	2,502.9
2. Borrowings (i+ii)	3,133.7	3,805.1	866.0	1,061.2	2,154.7	2,857.9	1,676.6	2,396.3	2,032.7	2,677.6
(i) Long-term	1,395.8	1,262.0	0.8	0.8	651.7	932.4	681.8	774.8	565.6	686.3
(ii) Short-term	1,737.9	2,543.1	865.2	1,060.4	1,503.0	1,925.5	994.8	1,621.5	1,467.1	1,991.3
3. Non-current liabilities and provisions	—	—	84.2	83.1	—	—	—	—	—	—
4. Current liabilities and provisions	1,893.6	1,872.7	2,590.5	3,163.9	967.7	1,499.0	902.0	1,017.6	987.9	1,283.3
Assets (at the end of the year)										
5. Gross fixed assets	6,489.3	7,264.6	10,668.5	11,782 8	3,541.4	4,229.1	3,267.3	3,994.9	5,266.4	6,626.1
6. Less depreciation	2,922.1	3,316.1	4,497.0	4,988.0	1,975.4	2,134.6	1,758.5	1,977.7	2 789.5	3,082.2
7. Net fixed assets (5—6)	3,567.2	3,948.5	6,171.5	6,794 8	1,566.0	2,094.5	1,508.8	2,017.2	2,476.9	3,543.9
8. Current assets (i+ii+iii)	4,074.5	4,699.6	5,275 2	6,689.7	3,122.4	3,992.3	2,851.6	3,706.1	3,065.8	3,433.9
(i) Inventories	2,792.8	2,968.3	3,127.3	3,441.6	2,053.4	2,405.0	1,388.6	1,694.2	1,805.5	1,701.2
(ii) Receivables and loans and advances	960.7	1,204.4	1,370.8	1,922.5	1,010.0	1,452.7	1,321.0	1,859.3	1,146.9	1,611.9
(iii) Others	321.0	526.9	777.1	1,325.6	59.0	134.6	142.0	152.6	113.4	120.8
9. Other assets	—	—	142.4	125.6	64.0	91.3	605.3	455.0	135.8	144.8
Total : Liabilities (1 to 4) or Net assets (7 to 9)	**7,641.7**	**8,648.1**	**11,589.1**	**13,610.1**	**4,752.4**	**6,178.1**	**4,965.7**	**6,178.3**	**5,678.5**	**7,122.6**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	9,837.5	10,963.8	12,850.0	14,630.6	6,690.2	8,202.2	5,316.1	5,734.1	7,677.0	8,767.3
11. Increase in stock of finished goods and work in progress	188.4	192.5	61.7	297.2	146.6	356.3	6.0	250.9	147.3	17.3
12. Value of production (10+11)	10,025.9	11,156.3	12,911.7	14,927.8	6,836.8	8,558.6	5,322.1	5,985.0	7,824.3	8,784.6
13. Other income	96.9	112.5	371.2	554.1	127.8	101.1	472.0	932.1	126.1	235.5
Expenditure										
14. Materials, stores and other mfg. expenses	6,423.0	7,248.5	7 173.3	8,843.5	4,350.2	5,597.7	3,617.5	4,258.0	4,949.7	5,475.0
15. Current repairs	71.9	85.7	171.0	212.2	45.7	48.5	71.9	82.4	123.9	143.1
16. Salaries and wages	1,887.4	2,043.2	2,576.6	2,860.9	1,320.1	1,530.4	854.4	913.2	1,108.3	1,283.2
17. Welfare expenses	167.7	153.5	155.9	182.0	84.1	89.4	112.2	129.0	75.5	90.1
18. Managerial remuneration	3.6	3.2	—	—	—	—	—	—	0.4	0.2
19. Other expenses	356.3	401.7	395.5	446.8	376.2	477.4	349.2	411.7	453.2	530.5
20. Depreciation	340.7	395.4	327.6	514.4	158.8	197.2	199.2	237.1	285.3	331.6
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	872.2	937.6	2,483.1	2,422.1	629.5	719.1	589.7	885.7	954.1	1,166.4
23. Interest	342.7	444.8	134.7	183.3	266.7	394.1	208.8	311.8	235.4	332.2
24. Tax provision	—	—	810.0	650.0	128.0	32.0	116.2	146.1	280.0	260.0
25. Profit after tax (22—23—24)	529.5	492.8	1,538.4	1,588.8	234.8	293.0	264.7	427.8	438.7	574.2
Appropriations										
26. Dividends (i+ii)	145.7	145.7	276.8	319.4	84.5	112.0	142.6	142.6	143.0	143.0
(i) Equity	145.7	145.7	276.8	319.4	82.6	110.2	142.6	142.6	142.3	142.3
(ii) Preference	—	—	—	—	1.9	1.8	—	—	0.7	0.7
27. Profit retained (25—26)	383.8	347.1	1,261.6	1,269.4	150.3	181.0	122.1	285.2	295.7	431.2
Total : Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**10,122.8**	**11,268.8**	**13,282.9**	**15,481.9**	**6,964.6**	**8,659.7**	**5,794.1**	**6,917.1**	**7,950.4**	**9,020.1**
Operational indicators (per cent)										
(a) Net worth/total net assets	34.2	34.3	69.4	68.3	34.3	29.5	48.1	44.7	46.8	44.4
(b) Inventories/net sales	28.4	27.1	24.3	23.5	30.7	29.3	26.1	29.5	23.5	19.4
(c) Operating profit/net sales	8.9	8.6	19.3	16.6	9.4	8.8	11.1	15.4	12.4	13.3
(d) Operating profit/total net assets	11.4	10.8	21.4	17.8	13.2	11.6	11.9	14.3	16.8	16.4
(e) Profit after tax/net worth	20.3	16.6	19.1	17.1	14.4	16.1	11.1	15.5	16.5	18.2
(f) Equity earning/equity capital	50.9	47.3	144.5	99.5	47.9	44.9	32.7	52.8	67.7	88.7
(g) Equity dividend	14.0	14.0	26.0	20.0	17.0	17.0	17.6	17.6	22.0	22.0
(h) Equity dividend coverage. (No. of times)	3.6	3.4	5.6	5.0	2.8	2.6	1.9	3.0	3.1	4.0
(i) Paid-up value per equity share (Rs.)	25.00	25.00	100.00	100.00	100.00	100.00	125.00	125.00	100.00	100.00
(j) Market price of an equity share (Rs.)	84.50	92.00	590.50	812.00	321.25	235.00	396.25	385.00	543.50	518.00
(k) Gross yield	4.1	3.8	4.4	2.5	5.3	7.2	5.6	5.7	4.0	4.2
(l) Gross fixed assets formation	17.9	11.9	29.7	10.4	15.2	19.4	13.7	22.3	15.4	25.8
(m) Debt/equity	0.53:1	0.42:1	..	..	0.40:1	0.51:1	0.29:1	0.28:1	0.21:1	0.22:1

NOTES : ..Category not applicable ... Amount/Precentage is negligible —Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometime the items also. Totals may not add up due to rounding off.

EQUITIES

Feeble recovery

Bombay, September 7

After a subdued spell, pivotals staged a feeble recovery on emergence of short-covering and replacement support at the lower levels during the past week. Price movements were generally small in the absence of any significant buying or selling. In a few cases, however, price variations were large. Activity was restricted and the undertone at the close of the week was barely steady. The market was open for trading only for two days, namely, on September 1 and September 4 on account of intervening holidays.

Century staged a smart rally from the week's low of Rs 795 to Rs 809 before closing at Rs 808, with a small net gain of Rs 2.50. Standard sought a lower level at Rs 508. The scrip also recovered strongly to Rs 515. However, on balance, it yielded five points. Khatau, Morarjee, Bombay Dyeing, G.E. Shipping, Scindia, Gwalior Rayon, PAL and Tata Oil lost small ground.

TELCO suffered a setback on reports that certain bond holders had approached the Controller of Capital Issues against the management's adjustment price of Rs 64.29 following the proposed bonus issue of two-for-five. The bondholders' contention was that they should get Rs 90 per share of Rs 225. According to the company's adjustment price, the bondholders would stand to lose Rs 5 crores out of their capital contribution, the bondholders have argued. The scrip came down to as low as Rs 574 from Rs 606. The closing was, however, at Rs 596 with a marked loss of 10 points.

Voltas, however, firmed up by eight points to Rs 209 on informed buying. NRC also hardened by Rs 5 to Rs 355. Tata Mills, Tata Chemicals, Larsen, Tata Steel, ACC, Amar Dye-Chem and Indian Dyestuff ruled steady-to-better.

In the cash section, Bajaj Auto continued to encounter heavy selling on uneasy labour situation at its Pune plant. The scrip was marked down further by Rs 105 to Rs 1,370. The other major losers were Dempo Steamship, MICO and Kenetic, dipping by Rs 30 to Rs 470, by Rs 12.50 to Rs 447.50, by Rs 6 to Rs 102 and IOC by Rs 9.25 to Rs 307. Century Enka recorded a useful gain of Rs 5 at Rs 660 on replacement support.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 29-8-81	High	Low	Closing quotations 5-9-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	210.00	215.00	215.00	215 00
Bombay Dyeing (25)	83.00xd	84.00	80.00	80.50
Central India (50)	59.00	59.00	57.00	58.00
Century (100)	805.50	809.00	795.00	808 00
Dawn (50)	74.00	74 00	74.00	74.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	110.00	110 00	100.00	105.00
Gokak (100)	204.00	204.00	204 00	204.00
Gwalior Rayon (10)	56.50	56.00	54 50	55.50
Khatau (100)	260.00	265.00	255.00	255.00
Kohinoor (100)	55.00	55.00	55.00	55.00
Morarjee (100)	247.50	250.00	245.00	245.00
National Rayon (100)	350.00	355.00	350 00	355.00
New Great Eastern (100)	100.50*	100.50	96.50	96.50
Phoenix (100)	47.00*	—	—	47.00*
Podar (10)	8.00	8.00	7.50	7.50
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	72.50	72.50	71.50	72.50
Standard (100)	520.00	522.00	508.00	515.00
Svadeshi (100)	171.00	171.00	168.00	168.00
Swan (100)	217.50	220.00	215.00	220.00
Tata Mills (25)	27.00	27.00	24.00	27 00
Electric				
Ahmedabad (100)	92.50xd	93 00	91.50	93.00
Andhra Valley (100)	129.00	118.00	116.00	117 00
B.Subarban(100)	122.50	120.00	118.00	113.00
Tata Hydro (100)	122.00	116.50	115.00	116.50
Tata Power (100)	120.00	118.00	115.00	115.00
Steel				
Mukand (10)	27.75	28 00	27.00	27 75
Tata Steel (100)	344.00	346.00	335.00	345 00
Engineering				
Larsen & Toubro (10)	63 00	65 50	63.50	63.50
Tata Eng. & Loco (100	606.00	602.00	574.00	596.00
S.L.M. Maneklal (100)	170 00	162.50	155.00	157.50
Voltas (100)	201.00	209.00	202.00	209.00
Walchandnagar (100)	210.00	212 50	195.00	209.00
Dyes & Chem				
Amar Dye-Chem (100)	147.50	147.50	141 25	147 50
Indian Dyestuff (100)	217.00	222 00	21[illegible].00	219.00
Polychem (50)	72.00	72 00	70.00	72 00
Tata Chemical (10)	59 00	60.00	58.00	59.00
Shipping				
Great Eastern (10)	50.25	50.50	48.75	49.75
Scindia (20)	25.75	25.75	24.00	24 75
Cement				
A.C.C. (100)	140.00	140.50	136.50	140.50
Shree Digvijay (100)	150.00	150.00	150.00	150.00
Sugar				
Maharashtra (50)	48 00	49.00	48.00	49.00
Phaltan (50)	43.00*	40.00	39.00	39.00
Miscellaneous				
Bombay Burmah (25)	44.25	43.75	43 25	43.75
Hindustan Motors (10)	26.00	25.00	22 25	24.50
Premier Automobiles (100)	245 50	244.50	235.00	244.50
Pre. Construction (50)	78.00	79.00	77.00	77.00
Sirpur Paper (10)	30.00	29.00	28.00	28.75
Tata Oil (25)	66.00	66.50	64.50	65.00
W. Coast Paper (100)	101.25	102.50	102 50	102.50
Wimco (10)	14.50	14.25	14.00	14.25
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	321.50	322 00	312.00	321.00
Century Enka (100)	655.00	670 00	645.00	660.00
Garware Nylons (10)	35.00	35.25	34.50	34 50
Gold Mohur (100)	92.00*	—	—	92.00*
Indian Rayon (10)	87.00cd	87.50	84.00	87.50
J. K. Cotton (10)	17 25	18.00	17.25	18 00
J. K. Synthetics (10)	49 50	50 50	48 50	50.50
Lakshmi Vishnu (100)	58.00	58.00	58.00	58.00
Mafatlal Fine (100)	231 25	231 25	227.50	230 00
Mafatlal Industries (125)	380 00	387 50	377 50	377 50
Modella Woollen (10)	10.00	10.00	10.00	10.00
Modipon (10)	67.00*	—	—	67.00*
Nirlon (10)	58 00xd	58.00	56.00	57 25

	Closing quotations 29-8-81	High	Low	Closing quotations 5-9-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	55.00	55.00	54.00	55.00
Reliance Textile (10)	96.25	97 75	94 75	97.25
S. I. Viscose (100)	245 00	245 00	240.00	242.50
Stretch Fibres (10)	8.50	8.50	8.00	8.50
Swadeshi Polytex (10)	15 25	15.00	14 50	15.00
Electric				
Amalgamated (10)	7.00*	—	—	7.00*
Surat (100) ...	94.00xd	94.00	94.00	94.00
Cement				
Mysore Cement (10)	32.00	30 00	29.50	30 00
Saurashtra Cement (100)	110.00*	—	—	110 00*
Paper				
Andhra Paper (100)	220.00	220.00	220.00	220.00
Bhadrachalam (10)	17.50*	—	—	17.50*
Jayant Paper (100)	160.00	160.00	160.00	160 00
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	34.50	34.50	34.50	34 50
Ferro Alloys (100)	272.50	272.50	260.00	260 00
Hind Aluminium (10)	48 50	47.50	46.00	47 50
Khandelwal Ferro (100)	127.00	127.00	127.00	127 00
Mahindra Ugine (10)	54.00	55.50	52.00	54.00
Tata Yodogawa (100)	125.00	125.00	125.00	125.00
Engineering				
Associated Bearings (100)	375.00	375.00	372.50	375.00
Bimetal Bearings (10) ...	41.00*	44.00	39.00	40.00
Blue Star (10)	32.75	33.00	32.50	32.50
Elecon Engineering (100)	435.00	435.00	435.00	435.00
Gujarat Steel Tube (100)	625.00	625.00	625.00	625.00
Hindustan Brown (100)	306 25*	—	—	306 25*
Ingersoll-Rand (10) ...	101.00	103.00	101.00	103 00
Jyoti (100)	245 00	245.00	245.00	245.00
Kirloskar Cummins (100)	520.00	522.50	517.50	520.00
Kirloskar Oils (10) ...	28 25	28.50	28.00	28.00
Kirloskar Pneumatic (10)	50.00	49.50	49.50	49 50
Mahindra (10)	50.00	50.00	48.00	48.00
New Standard (100) ...	125.00	122.50	120.00	122 50
Sandvik Asia (100) ...	340 00*	331.25	327.50	327 50
Vulcan-Laval (10) ..	33.50	33 00	32.50	32 75
Zenith Steel (10) ...	44.00	45.00	43.00	45.00
Cables & Elec.				
Asian Cables (100) ...	226.25	215.00	215.00	215 00
Bajaj Electricals (100) ...	195.00	195.00	195.00	195 00
Crompton Greaves (100)	365.00*	365 00	355.00	355.00
Otis Elevator (10) ...	54.00*	—	—	54.00*
Siemens India (10) ...	52.00	52.00	55.50	51.00
Chemicals				
BASF (10)	56.00	56.00	56.00	56.00
Bayer (India) (100) ...	233.75	250.00	230.00	230.00
Chem & Fibres (10) ...	21.50	21.00	20.50	21.00
Colour-Chem (100) ...	187.50	195.00	190.00	195.00
German Remedies (10)	25.75	25.75	25.75	25.75
Gujarat State Fert. (100)	428 00	425.00	420.00	425.00
Hindustan Lever (10) ...	42.00	43 75	41.75	42.75
Indian Organic (100) ...	316.00	315.00	300.00	300.00
National Organic (100)	204.00	206.00	200.00	206.00
Pfizer (10)	25.00	25.25	24.50	24.50
Polyolefins Ind. (100) ...	290.00	293.75	288.75	290 00
Sandoz (10)	25 50	25 75	24.75	25.75
Synthetics (100) ...	102.00	102.00	101.00	101.00
Warner-Hindustan (10)	23 00*	23.50	23.50	23.50
Zuari Agro (10)... ...	26.00	26.00	25.00	26.00
Miscellaneous				
Bajaj Auto (100)	1,475.00	1,400.00	1,370.00	1,370.00
Bombay Oxygen (100)	112.50	115.00	110.00	115.00
Cadbury (10)	19.50	21.00	20.50	21.00
Camphor & Allied (100)	227.50*	—	—	227.50*
Ceat Tyres (100) ...	197.50	197.50	197.50	197.50
Colgate-Palmolive (10)	138.00	138.00	134.00	137.00
Empire Industries (15)	26.00	26.00	26.00	26 00
Fibre glass (10) ...	22 00	22.25	21.00	22.25
Gammon India (10) ...	21.25	21.25	20.50	21.00
Hindustan Ferodo (10)	42 50*	38 00	37.00	38 00
Hoechst Dyes (10) ...	26.00	25 75	25.25	25 75
Indian Hotels (10) ...	76.00	77 00	74.00	77.00
Motor Industries (100)	460.00	462.50	447.50	447.50
Tata-Finlay (10) ...	12.25	12 50	12.50	12.50

Notes: Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.
(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the columns under report
(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period

Market Gossip

Shipping dividends

THE Shipping Development Fund Committee (SDFC) is apparently trying to be strict with the dividends of the shipping companies which might have taken additional loans or defaulted in respect of instalments or interest of the loans taken from the Committee. In the case of Ratnakar Shipping, it has rejected the proposal of the directors for a 10 per cent equity dividend, and Chowgule Steamships, which had taken a fresh loan of Rs 8 crores from the SDFC, has been asked to reduce its dividend from 15 to 10 per cent. The SDFC, in making its decision known advances no reasons for it. But in the case of Ratnakar Shipping, there would appear to be some default in repayment of the loans and in the case of Chowgules, the argument would seem to be that if the SDFC had not extended a loan of Rs 8 crores, even with the upturn in the freight market and the company doing well in the 1980-81, there would not have been that liquidity surplus to declare a 15 per cent dividend. The SDFC, under the conditions it lays down for loans, requires that a shipping company should take its prior permission before paying a dividend which the directors may have recommended. Even in the case of a shipping company which has not taken recently a loan from it, the SDFC stipulates that its prior permission will have to be obtained before declaration of a dividend above 20 per cent.

Blade war

MALHOTRAS, who manufacture the Topaz and other brands of blades and reportedly enjoy 80 per cent of the Indian market for blades, and Wilkinson Sword Ltd of the UK are involved in a blade war. Wilkinson is setting up in collaboration with Asian Cables and Karnataka State Industrial and Investment Corporation a Rs 10-crore project in Mysore, which is expected to produce about 40 million blades and 10 million shaving systems during 1982-83. The plant expects to reach its full capacity of 150 million blades and 20 million shaving systems in about three years after it goes in production in the middle of next year.

Malhotras are obviously disturbed by this development and ran an advertisement campaign in newspapers to say that 'Wilkinson of England bought our blade machinery'. This has brought a retort from Mr Donald Jack Kemp, technical director of Wilkinson Sword, that the claim was baseless and the Wilkinson had imported some equipment from Malhotras in line with the practice to evaluate the performance of the blade machinery manufactured by other companies in the field. This machinery was never used by Wilkinson. Malhotras point out that it was Mr Kemp himself (then works director of Wilkinson), who had issued in 1976 certificates of inspection after eight hours of production run for the machinery bought and the next day ran an advertisement repeating the earlier statement and showing the certificates issued by Mr Kemp for two of the machines. So they say it is no use Mr Kemp giving another story now. Sources close to Malhotras also claim that Wilkinson Sword blades have fallen behind in blade manufacturing technology and their sales of razor blades and shaving systems have dropped to below 50 per cent in the last two years. Wilkinson was losing money heavily in its blade manufacturing division and had been salvaged only by amalgamation of its balance-sheet with a match company. Moreover, Wilkinson have now been taken over by the American giant corporation, Alleghany Ludlam to save it from going into liquidation.

Pig iron: Will supplies improve?

THE liberalisation of pig iron imports under the import policy for 1981-82 by placing them under open general licence has obviously not brought relief to the foundries, and the Government early this week canalised imports of this commodity again through the Steel Authority of India Ltd. It appears pig iron in any grade will be imported only through SAIL.

The decision to canalise pig iron imports is said to have been taken in view of heavy premium of Rs 3,000 per tonne the material is currently attracting in open market. The Government expects canalised imports at international prices should provide a measure of stability to the operations of the consumers, especially foundries and spun pipe units, a number of which are reported to have downed the shuttters owing to non-availability of the material. Capacity utilisation in these units, which have somehow managed to remain in the picture, has dropped to a dismal 35 per cent and chances for improving this rate are not bright as pig iron production by indigenous steel plants has been declining. So unless the government agency moves rapidly in the matter of placing orders for imported pig iron, it appears consumers will have to bear with the present difficulties.

At the present world prices, the landed cost of imported pig iron will be higher by about Rs 1,000 per tonne compared to the indigenous price, because 40 per cent import duty and Rs 160 per tonne countervailing duty are involved.

Bumper harvest, higher consumption

THE Food and Agricultural Organisation (FAO) expects a total cereal production this year between 1.48 billion and 1.535 billion tonnes which compares with the 1980 figure of 1.435 billion tonnes. But FAO has cautioned that despite bumper harvest prospects, the world cereal stocks are likely to fall this year to the lowest level since 1975-76. While there could be a rise of 45 million to 100 million tonnes over 1980 figure, the FAO believes that most of the increase is likely to be accounted for by increased consumption and stocks to be carried over in 1982 are forecast to be 27 million tonnes down at 224 million tonnes, equivalent to just 15 per cent of the world consumption.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*September 5, 1981*	*A week ago*
Groundnut	*(Rajkot)*	550	538
Rapeseed	*(Kanpur)*	508	508
Sesamum	*(Delhi)*	600	600
Castorseed	*(Kanpur)*	283	291
Linseed	*(Kanpur)*	523	525
Sugar	*(Bombay) (a)*	528	568
Cotton	*(Bombay) (b)*	4,400	4,400
Jute	*(Calcutta) (c)*	240	240
Aluminium	*(Bombay) (d)*	1 480	1,480
Copper	*(Bombay) (e)*	3,580	3.600
Lead	*(Calcutta) (f)*	1,250	1,250
Zine	*(Calcutta) (g)*	1,710	1,720
Gold	*(Bombay) (h)*	1,752	1,780
Silver	*(Bombay) (i)*	2,730	2.715
Caustic soda	*(Bombay) (j)*	635	635
Soda ash	*(Bombay) (k)*	238	242

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap, (e) Wire coil, (f) Scrap (g) Hard spelter, (h) Standard. (i) .996. (j) Flakes and (k) Tata

COMMODITIES

Limited business in cotton

Bombay, September 7

Listless trading conditions prevailed in the spot cotton market during past week with limited business passing. For want of adequate support, prices of a few varieties declined by Rs 50 to Rs 100 per candy over the week.

According to informed sources, arrangements are being made in Karachi to expedite the shipment of Pakistani cotton. The Indian Cotton Mills' Federation is continuing its efforts to impress upon the mills to take up as much Karachi cotton as possible. So far, the efforts have not brought about the desired degree of response.

In the meanwhile, the ICMF has urged the Industrial Development Bank of India (IDBI) to grant more loans to textile mills to enable them to go ahead with their approved modernisation programmes. With the escalation in their prices the book value of newly installed machinery, according to the ICMF, is bound to be higher than the one adopted for creating of security while sanctioning the modernisation loans. The higher book value would provide enough security for any additional loan that needs to be granted by IDBI for taking care of the overrun in the projects, it is argued by the ICMF.

At the time of applying for the IDBI soft loans, the mills had made financial projections on the basis of the then profitable working and the then obtaining machinery prices. They had also provided for promoters' contribtution towards investment in fixed assets and working capital requirements on the basis of then prevailing situation. These calculations had, however, gone awry because of the steep rise in machinery prices and the deteriorating conditions of the mills. It is in these circumstances that the ICMF has asked for a review of the IDBI soft loan scheme.

The IDBI itself is apparently in the hunt for more funds. It is planning to tap deposits from the public in a big way besides resources from abroad. Its attention is increasingly turning to non-traditional sources of finance to bridge a substantial part of the resources gap estimated at over Rs 400 crores for 1981-82.

The demand for textile machinery has declined markedly in the past few months and many manufacturers have been asked to postpone or cancel orders previously placed. The demand decline is to the extent of 65 per cent. In the case of some of the manufacturers. This situation has come about at a time when the machinery manufacturers have been able to supply machinery within 18 to 24 months as against 30 to 36 months earlier.

Reports from Ahmedabad indicate that the National Textile Corporation (Gujarat) is considering a proposal to set up a 100 per cent export-oriented composite textile mill at a total cost of Rs 38.32 crores at Naroda. The unit will have a foreign exchange component of Rs 13.57 crores and will have a capacity to produce 60,000 metres, providing employment for 1,650 workers.

The following is the trend of prices of some of the leading varieties :

(Rs. per candy)

	Septembet 4	August 28
Digvijay	...	5,000-5,100
Kalyan	4,650-4,800	4,700-4,800
Saurashtra CO2	4,800-5,000	4,850-5,050
Shankar 4	5,700-6,100	5,800-6,150
Maharashtra H 4	5,450-5,600	5,450-5,600
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,450	5,300-5,450
MP Y1	4,900-5,050	4,900-5,050
MP 1007	5,150-5,250	5,150-5,250
MP A 51/9	5,100-5,200	5,100-5,200
MCU 5 Guntur	5,900-6,100	5,900-6,100

Yarn prices rise

Bombay, September 7

A rise in prices highlighted trading in the local yarn market. 150D NRC, 120D NRC, 150D CR, 120D CR and 100D SIV were quoted higher at Rs 52.31, Rs 54.52, Rs 52.03, Rs 55.07 and Rs 61.67 against Rs 51.76, Rs 54.10, Rs 51.76, Rs 54.10 and Rs 61.12 respectively in the preceding week. The price of 150D acetate, however, was quoted lower at Rs 48.46 against Rs 49.01 in the previous week.

Dull conditions in jute goods

Calcutta, August 31

Trading was a dull affair in jute goods in the Calcutta gunny market during the past week as buyers were generally reluctant to make fresh commitments pending the Government's decision on industry's request for subsidy on exports of jute goods.

Price fluctuations consequently were dictated by speculative activity throughout the week under review. Initially there was a setback in the wake of selling but prices reversed the trend subsequently on optimism that the Centre would grant the industry's request on subsidy.

The fibre market was also dull due to slack buying by jute mills. The inflow of the fibre was however fair this being the peak arrival season.

New Delhi reports reaching here said that for the first time in several years the Union Commerce Ministry has officially admitted of the difficult conditions in world markets for jute goods leading to losses on exports. It is considering proposals for giving cash compensatory support and DGS and D purchases to boost demand.

At the prevailing market prices, mills are losing on an average Rs 2,707 a tonne on carpet backing cloth, Rs 1,430 a tonne on hessian and Rs 857 a tonne on sacking, according to the ministry. It has attributed the difficult situation to the recessionary conditions in developed countries and competition from Bangladesh and synthetic substitutes. Information on the prospects for the sale of carpet backing through overseas offices is being collected and corrective measures are under way.

Meanwhile, the Centre is considering the possibility of a short-term buffer stock in sacking as also compensatory assistance for the export of carpet backing, according to Mr Saran Singh, Textile Secretary in the Union Ministry of Commerce. Mr Singh told a two-day seminar on jute here over the week-end that Indian jute goods could regain their competitive position in the international market by taking specific measurts to reduce costs. The industry, he said, had kept

Indo-Australian trade: Exploring new areas

Concluded from page 477

Referring to the repeated talk on developed countries and third world countries getting together, Mr Gough said Australia had technical advantages and India plenty of labour. This meant there were opportunities for joint ventures. Australia would spend Rs 36 billion on mining ventures in the next few years and would need equipment for that. Indian engineers could get into those ventures. He also believed there would be advantages in an exchange of intellectuals of agricultural universities and found the strides made by agriculture in Punjab and Haryana tremendous.

On the problem of difficulties, Mr Gough said Australia did find Indian trade barriers difficult. It was difficult to invest here and taxation rates were very high. It was sad that there was not greater interchangeability. For instance, he said, it was sad there was a duty on imports of Australian wool. He felt India could have developed a big worsted wool industry and had passed up an enormous international market.

One area in which Australia could help India, a delegation member said, was in materials handling in the mining industry. A large number of mining companies would be ready to offer assistance in this area. Australia could also supply many more minerals to India.

Finally, Mr Gough stressed the importance of Indian businessmen visiting men there. Taiwan, South Korea and Australia personally or finding middle-Japan did that initially, as well.

its cost element shrouded in mystery and defied efforts of the Jute Commissioner's office to carry out a detailed and scientific analysis of the cost structure.

He cited raw jute purchases by the mills as a case in point. There was a nexus between the private trader and the millowner and the price paid to the jute grower was often below the statutory minimum. The books, however, revealed another story. Despite lack of reliable data and co-operation from the industry, the JMDC technical committee has prepared a detailed report on raw jute, power and fuel (coal) and stores and spares used by the industry. In his view there was considerable scope for cost reduction and achieving higher efficiency in the industry and hope that the technologists and scientists participating in the workshop would find some solutions to the many problems faced by the industry.

Groundnut oil gains

Bombay, September 7

After the recent nervous selling due to raids by income-tax officials on the premises of a number of oil traders, groundnut oil prices again started going up on encouraging advices from producing centres in the oilseeds market. The price was lifted by Rs 1.56 to Rs 150.80 per 10 kg. In sympathy with the groundnut oil, groundnut also moved up. Karad bold, Saurashtra bold and Saurashtra quality edged up by Rs 2 each to Rs 620, Rs 625 and Rs 630 per 100 kg respectively.

Imported oils, however, ruled steady in limited activity. Palmoleine closed unchanged at Rs 143.52 and soyabean at Rs 132.08 per 10 kg. RBD, on the other hand, dropped sharply by Rs 5.54 to Rs 115 per 10 kg.

Castorseed receded on poor demand. Madras small and Kanpur bold lost Rs 2 each at Rs 318 and Rs 310 per 100 kg. Castor commercial oil was quiet at Rs 68 per 10 kg against Rs 68.25 in the previous week. Castor BSS oil, however, remained steady at Rs 73.25 per 10 kg.

A drifting trend was in existence in linseed and its oil. The former dropped by Rs 2 to Rs 528 per 100 kg and the latter by Rs 3.16 to Rs 125.84 per 10 kg.

Activity was far from satisfactory in cakes following dullness on the export front. Groundnut expeller dropped by Rs 25 to Rs 1,825 per tonne while de-oil, castor and cottonseed ruled steady.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils :

	5-9-1981	**29-8-1981**
G. nut		
Karad bold	620.00	618.00
G. nut oil	150.80	149.24
Cast. Md. Sm.	318.00	320.00
Cast. oil com.	68.00	68.25
Cast. oil BSS	73.25	73.25
Linseed bold	528.00	530.00
Linseed oil	125.84	129.00

Grains subdued

Bombay, September 7

A subdued trend prevailed in the local foodgrains market during the past week. Barring wheat (Saurashtra) and rice (Basmati) all other grains showed a steady to declining trend.

In cereals the superior variety of wheat declined by Rs 7 to Rs 270-295 per quintal. Demand was slack. Receipts were 2,000 bags per day. The Saurashtra variety hardened by Rs 2 to Rs 208-235 per quintal.

In rice, the Surti Kolam variety ruled steady at Rs 340-400 per quintal. Supplies were comfortable. The Basmati variety firmed up by Rs 25 to Rs 500-700 per quintal on account of paucity of supplies. Export demand was good.

In coarse grains, trading was restricted. Jowar and maize maintained the earlier week's levels of Rs 190-235 per quintal and Rs 185-190 per quintal respectively. Bajra eased by Rs 3 to Rs 190-250 per quintal.

Among pulses gram and massoor dal declined. Gram was traded Rs 9 lower at Rs 380-400 per quintal and masoor dal was traded Rs 33 lower at Rs 460-490 per quintal. Tur dal and urad (Khandesh) ruled steady at Rs 450-575 per quintal and at Rs 310-315 per quin-

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DIRECTOR OF INSPECTION
(Research, Statistics, Printing & Public Relations)
INCOME-TAX DEPARTMENT
New Delhi-110001.

davp 81/122

DHRANGADHRA CHEMICAL WORKS LIMITED

NOTICE

It is hereby notified for the information of the public that Dhrangadhra Chemical Works Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for the production, supply, distribution or control of 1,200 MT per annum of Stainless Steel Sheets. Other particulars of the proposed undertaking are as under :

(i)	Name of the proposed undertaking :	**DHRANGADHRA CHEMICAL WORKS LIMITED**
(ii)	Name(s) of person(s) or authority/authorities proposing to establish the new undertaking. Where it is a body corporate furnish details of its management structure together with those of the proposed undertaking :	Dhrangadhra Chemical Works Limited which is managed by Managing Directors under the supervision and control of the Board of Directors, namely : Shri Sahu Shriyans Prasad Jain (Chairman) Shri Gian Chand Jain (Managing Director) Shri Shashi Chand Jain (Managing Director) Shri H. H. M. Sriraj Dhrangadhra Shri A. K. Roy Shri Gopaldas P. Parikh Shri Dharma Vira Shri Radhakrishna R. Ruia Shri F. H. Tapia Shri K. M. Philip Shri Prem Chand Jain Shri D. G. Ramaiah Dr. G. P. Kane The new undertaking will be managed by the Managing Directors under the supervision and control of the Board of Directors. If necessary, a new Managing Director may be appointed to look after the new undertaking subject to the approval of the Government of India.
(iii)	Capital structure of the applicant person or authority and of the proposed undertaking :	

SHARE CAPITAL :

Authorised Capital :		
1,00,000 Preference Shares of Rs. 100/- each	1,00,00,000	
2,50,000 Equity Shares of Rs. 100/- each	2,50,00,000	3,50,00,000
Issued, Subscribed and Paid up Capital :		
2,591—11% (subject to tax at source) Cumulative Redeemable Preference shares of Rs. 100/- each fully paid up	2,59,100	
25,000—9.5% (subject to tax at source) Cumulative Redeemable Second Preference shares of Rs. 100/- each fully paid up	25,00,000	
35,000—9.5% (subject to tax at source) Cumulative Redeemable Third Preference shares of Rs. 100/- each fully paid up	35,00,000	62,59,100
2,34,774 Equity Shares of Rs. 100/- each fully paid up	2,34,77,400	
Add : Forfeited Shares	200	2,34,77,600
		2,97,36,700
140—7.8% Cumulative Redeemable Preference shares of Rs. 100/- each not surrendered by shareholders for redemption		14,000
		2,97,50,700

(iv)	Proposed location of the new undertaking :	Ponda Taluka, Goa
(v)	Brief outline of the cost of project, the scheme and source of finance :	Estimated cost of the project —Rs. 300 lakhs. The project is intended to be financed partly from our own resources, partly from borrowings and incentives available from State authorities for backward areas.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this 31st day of August, 1981.

Registered Office :

Dhrangadhra-363-315
Gujarat State

For **DHRANGADHRA CHEMICAL WORKS LIMITED.**

SHASHI CHAND JAIN
Managing Director

tal respectively. Moong (chumki) was quoted at Rs 450 per quintal showing no change over the week.

Sugar recedes

Bombay, September 7

Sugar prices declined sharply in the local market due to lack of buying support. The price of sugar C-30 was quoted Rs 40 lower at Rs 524-531 per quintal. The undertone was subdued. Upcountry demand was at a low ebb. The weekend stocks of sugar improved from 906 bags in the previous week to 1,111 bags at the close of the past week. The price of C-30 as on September 5, 1981 was lower by Rs 322 per quintal than on the corresponding date a year ago.

Khandsari inferior variety was quoted at the weekend at Rs 400 per quintal, while the superior variety was placed at Rs 500 per quintal.

The Union Government fixed the tariff value of sugar at Rs 550 per quintal for September 1981.

Gold down, silver erratic

Bombay, September 7

A downtrend in gold and an erratic tendency in silver marked trading in the Bombay bullion market during the past week. Standard mint gold opened at Rs 1,780 per 10 gms and gradually drifted to close at Rs 1,745 per 10 gms. Ready silver (.999 fineness) resumed at Rs 2,715 per kg and firmed up to Rs 2,745 per kg before closing at Rs 2,730 per kg.

Money easy

Bombay, September 7

Conditions in the Bombay short-term money market were comfortable during the past week. In the inter-bank call section interest rates opened at 9.5 per cent and moved between 8.5 per ecnt and 10 per cent. The market closed with interest rate at 10 per cent.

Bank credit contracts

Bombay, September 7

Bank credit of scheduled commercial banks contracted by Rs 31.38 crores to Rs 26,790.81 crores during the week ended August 28, 1981. Aggregate deposits spurted by Rs 204.12 crores to Rs 40,987.96 crores. The balances of banks with the Reserve Bank of India (RBI) declined by Rs 588.91 crores to Rs 4,543.32 crores while their borrowings from the RBI increased by Rs .04 crores to Rs 561.60 crores.

RALLIS INDIA LIMITED

NOTICE

It is hereby notified for the information of the public that RALLIS INDIA LIMITED proposes to make an application to the central Government in the Department of Company Affairs, New Delhi, under sub-section (4) of Section 23 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval to the acquisition of the whole or part of PROTEIN PRODUCTS OF INDIA LIMITED. Brief particulars of the proposal are as under:

(i)	Name and address of the applicant undertaking	: RALLIS INDIA LIMITED, 'Ralli House', 21 D. Sukhadvala Marg, Bombay-400 001.
(ii)	Name and address of the undertaking the whole or part of which is proposed to be acquired and the manner of acquisition, i.e., by purchase take-over or otherwise	: PROTEIN PRODUCTS OF INDIA LIMITED, Sandynalla, Sholur Town Panchayat, Ootacamund-643 237. The acquisition is by way of purchase of 5,36,000 equity shares of Rs. 10/- each fully paid, at Rs. 12.50 per share.
(iii)	Management structure of the applicant undertaking	: The Company is a Board-managed Company. The Directors of the Company are :— Mr. D. S. Seth (Chairman), Mr. A. D. Mango (Deputy Chairman), Sir George Burton, Mr. J. S. Kerridge, Mr. A. S. Mathieson, Dr. F. A. Mehta, Mr. V. J. Sheth, Mr. M. R. Shroff, Mr. H. J. Silverston, Mr. R. N. Tata, Mr. J. S. Hewitt (Alternate Director to Sir George Burton).

(iv) Capital structure of:

(a) the applicant undertaking :

Authorised Capital	Rs.
Preference	1,00,00,000
Ordinary	8,00,00,000
Unclassified	1,00,00,000
	10,00,00,000
Issued, Subscribed and Paid-up as at 31st August, 1980:	
75,000 6% Cumulative Preference Shares of Rs. 100/- each fully paid ..	75,00,000
4,96,039 Ordinary Shares of Rs. 100/- each fully paid	4,96,03,900
	5,71,03,900
Add : Forfeited Shares	1,800
	5,71,05,700

(b) the undertaking proposed to be acquired :

Authorised Capital	Rs.
Preference	75,00,000
Equity	2,00,00,000
	2,75,00,000
Issued, Subscribed and Paid-up as on 30th September, 1978:	
3,00,000 9.5% Redeemable Cumulative Preference Shares of Rs. 10/- each fully paid	30,00,000
9,00,000 Equity Shares of Rs. 10/- each fully paid	90,00,000
	1,20,00,000

(v)	Line(s) of business of the undertaking which will or is likely to emerge as a result of the proposed acquisition	: At present, Protein Products of India Limited manufactures and sells gelatine, ossein and dicalcium phosphate, and will continue to do so after the acquisition.
(vi)	Consideration for the acquisition	: Payable in cash.
(vii)	Scheme of finance indicating the sources of finance for the proposed acquisition	: Finance for the proposed acquisition is to be met from the Company's own current resources.

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice intimating his views on the proposal and indicating the nature of his interest therein.

Registered Office :

'Ralli House,
21, D. Sukhadvala Marg,
Bombay-400 001.

Dated this 25th day of August, 1981

RALLIS INDIA LIMITED

B. K. LASKARI
Secretary

Beyond headlines

Long-term planning in business

By K. CHANDRASEKHAR

"STRATEGIC planning" is a term we hear with increasing frequency. More and more managers in business firms and other organisations are trying to plan, execute and control the operations in a strategic manner. This means that they look for a more precise picture of desired results and a strategy for achieving them. They consider many alternate strategies, not merely how to continue current activities, plans and policies, for achieving the projections.

The post-independence era, with the governmental emphasis on industrialisation of our country and the consequent introduction of developmental plans, brought new resource applications, improved technology, varied groups of customers, and new forms of competition. Shortening product life cycles and the availability of new technologies and concepts caused many organisations to realise that they could not leave their future to chance and that management by intuition or reaction alone was, at best, risky. From this realisation that there was a growing need to guide future events evolved the concept called the planning process. Typical of a "mixed economy that we have adopted, the national government and large business houses have led the way in adopting this process.

Planning is a process by which an individual, organisation or nation decides in advance on some future course of action. The process consists of a series of steps, some of which may be taken immediately, to reach desired goals. Planning can be equally valuable to organisations in achieving their objectives and the individuals in attaining personal aims. At organisational level, it is concerned with taking action in the immediate present to prevent becoming obsolete in the future. To put it in another way, planning is concerned with how an organisation can change internally to adopt to variations in external conditions.

The entrepreneur(s) first of all should have some specific ideas for the direction of the organisation. Finding the best way to get there is what we call strategy development. The key to good strategy development is to foresee and use the external and internal forces or trends in order to move the organisation towards its objectives. There are certain important external factors, like the following ones, which make the planning process essential for organisational survival: (i) Accelerating pace of economic, social and technological changes; (ii) Interdependencies among modern organisations; and (iii) Complexity of social business undertakings.

In most organisations, management has been formalised by defining the duties and authority of members and by linking them in a hierarchial authority structure. Also, formal planning steps are common in which the level of organisation's output or services is forecast or set and budget for operating expenses and capital additions are prepared. Specific performance goals are often set and a control system is instituted to measure actual results and compare them with expected results.

This type of planning is known as operational planning when the nature and scope of activities have been prescribed and when policies which guide actions have been determined. The time horizon is no longer than one or perhaps two years, and management performance is evaluated on the basis of short-term results.

Operational planning is necessary but it alone is not sufficient. An organisation may survive and perform exceptionally well for many years by careful operational planning without even considering a change in its basic strategy. However, the best "strategic structure" or composite set of policies and plans will not achieve desired goals forever. Internal resources change and so too the external environment, including social, economic, political, technological, and physical components. Thus, every organisation needs to review systematically and regularly its objectives and goals, the broad plan or strategy currently used to achieve these goals, the level of accomplishment, the internal resources available for future activities, to expected shifts in external factors over the next few years, and alternative strategies which can be used to achieve goals in the future. This is strategic planning.

Strategic or long-range planning is thus much more concerned with major assessment of the external and internal forces, and with the establishment of long-term objectives and major strategies. In contrast to operational planning, strategic planning is not normally done at regular intervals. The basic steps in the planning process are as follows :—

(1) Determine organisational purpose and management philosophy (2) identify internal strengths and weaknesses (3) Monitor changes in the external environment (4) Forecast future conditions and establish planning premises (5) Determine external threats and opportunities (6) Formulate specific goals (7) Identify and evaluate alternative policies and strategies (8) Select best strategic plans (9) Prepare functional action plans (10) Prepare financial plans.

Life span of many new projects is getting relatively shortened for they become replaced by new, improved technology. Management is defined as planning and using resources such as time, money, energy, manpower etc to achieve stated objectives or goals. Objectives can serve a number of purposes since they state the basic long-term aspirations of the organisation, usually in terms of its values.

Strategy defines the basis for all the further action steps in planning. Developing an appropriate strategy is a creative process that tries to make maximum use of the internal and external macro forces to propel the organisation towards its objectives. Strategy can be thought of as making the best use of the forces over which we have little or no control by using the forces which we do control. Specific strategies would then be developed in production, finance, marketing, research and development, etc. Each strategy attempts to make optimal use of the external or internal forces to help attain the organisation's objectives.

In the mid-1970s, many firms and organisations had started formal long-range planning because of the expansion and resultant complexity in business operations and their need to evaluate many investment opportunities so as to allocate scarce resources most effectively. Strategic planning can provide benefits in any organisation which far exceed the cost if managers are willing to search for new opportunities in a changing, uncertain world rather than bask in the satisfaction of past accomplishm

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Dr Chandrasekhar is a senior faculty member at Southern India Banks' Staff Training College.

COMMERCE

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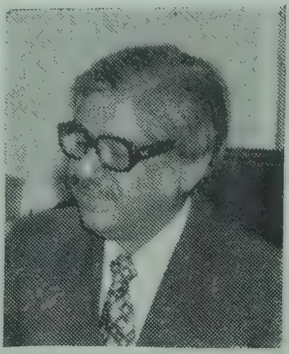
PEOPLE

Mr V. H. Doshi, managing director of Echjay Industries Private Ltd, has been elected president of the Association of Indian Drop Forging and Stamping Industries. Mr B. N. Kalyani, general manager of Bharat Forge Co Ltd, was elected vice-president.

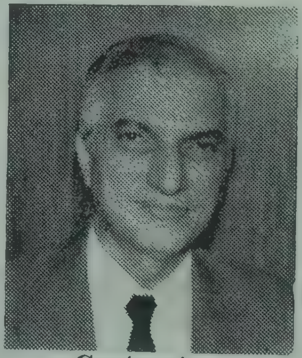

Bali

Mr V. K. Bali has been appointed president of the Tata Oil Mills Co Ltd from September 1, 1981. Till recently he was the vice-president of the company.

Mahajan

Mr N. N. Mahajan, who has taken over as the chief general manager of the Kanpur Circle of State Bank of India, was the chief executive officer of SBI at Los Angeles, USA. Mr Mahajan holds a master's degree in economics and joined the then Imperial Bank of India in 1952 and held many responsible positions with IBI, and its successor, SBI, especially in foreign exchange business and overseas expansion. His services were also loaned to other organisations and he also was a member of many trade delegations.

Mr S. H. Jadhav, director, Small Industries Service Institute, has taken over as the managing director of Bharat Leather Corporation from September 1, 1981.

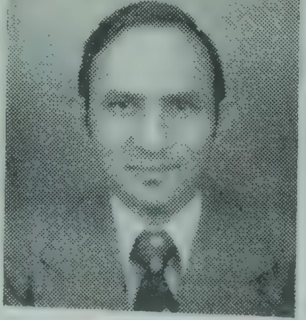

Contractor

Mr Dady K. Contractor has been elevated as general manager of the Central Bank of India with effect from September 9. Mr Contractor joined the bank in 1946 as an officer trainee and held several responsible positions. Till recently he was holding charge of the industrial finance division as its deputy general manager.

Mehta

Mr Labhshanker S. Mehta, who was till recently deputy general manager of Dena Bank, has been promoted as general manager with effect from September 9, 1981. He succeeds Mr Chandrakant R. Trivedi who has been appointed executive director of the bank. Mr Mehta joined the bank in 1943 and is an expert in international banking. He is also actively associated with several social, cultural and religious organisations.

Mr S. S. Roongta has taken over as traffic superintendent and chief public relations officer, Metropolitan Transport Project (Railways), Western Railway, at Churchgate, Bombay.


Shah

Mr N. P. Shah has been promoted as the assistant general manager (international division) at Bank of Baroda. He will be looking after project finance and correspondent relations in the bank. Prior to his promotion Mr Shah was looking after the Bombay city branches as regional manager.

THE WEEK

Industrial Development Bank of India will issue on Tuesday next its 23rd series of bonds to raise Rs 100 crores. The bonds, which will carry interest at 7.25 per cent per annum, will have a maturity period of 15 years.

★

The East India Cotton Association Ltd has received the concurrence of the Forwards Markets Commission to begin trading with effect from September 4 last in non-transferable specific delivery contracts in CJ-73, SRT-1, Shankar-4 and Varalaxmi varieties of cotton of 1981-82 season grown in Gujarat. However, delivery against the contract will be in the month not later than the third month following the month in which the contract was entered into.

★

Under an amendment to the Income-Tax rules passed by the Lok Sabha on Monday, companies can repay deposits in excess of Rs 10,000 by only account payee cheques or drafts.

★

The Salem steel plant went on stream on Sunday and has commenced production of cold-rolled stainless steel coils and sheets. This is the first public sector steel plant to be commissioned during this decade.

★

Kudremukh Iron Ore Co Ltd, a public sector undertaking, has signed two separate contracts with Rumania for setting up a pelletisation plant and for supply of three million tonnes of iron ore concentrates.

★

The Andhra Pradesh Government has decided to take over wholesale distribution of rice and wheat in the State within one year. For this purpose, Essential Commodities Corporation Ltd has been set up, Civil Supplies Minister, Mr G. Venkata Swamy, has announced.

★

Steel Authority of India Ltd has decided to give a rebate of Rs 50 per tonne on bars, rods and billets to housebuilders. It will also set up a design bureau at Visaknapatnam.

★

Wholesale price index

At 286.2 the latest available wholesale price index for the week ended August 29, 1981, showed a fall of 1 per cent over the preceding week. However, at this level the index was higher by 10 per cent than its level a year ago.

Money stringent

The Bombay short-term money market witnessed stringent conditions on Monday (September 14, 1981). Both notified and commercial funds were renewed at ten per cent. Fresh money was also transacted at ten per cent.

COMMERCE

Plight of the poor world

THE International Monetary Fund (IMF) in its 1981 annual report describes the world economic situation as 'difficult and disappointing'. The world economy is characterised by high rates of inflation in many countries; recession in industrial output, deceleration of growth, higher unemployment and record levels of interest rates in the industrial countries; instability of exchange rates, slowdown in trade expansion, falling terms of trade, large current account deficits and crippling debt burden of non-oil developing countries. The high levels of interest rates have constituted a drain on the international purchasing power of most net debtor countries. "This problem is especially serious for the non-oil developing countries at a time when their international purchasing power is already under pressure..." the IMF comments.

During 1980 the growth of real GNP of the industrial countries turned out to be a meagre 1.2 per cent as compared with about four per cent per annum during 1976-79. Real GNP recorded a decline, *albeit* nominal, of 0.2 per cent in the United States and of 1.7 per cent in the United Kingdom in 1980. Consumer prices in industrial countries increased at an accelerated rate of 12 per cent in 1980 as compared with 7 per cent in 1978. The plight of the non-oil exporting countries which numbered 110 was worse. At 4.8 per cent the average rate of growth of their real GDP in 1980 was lower than that in the preceding three years : 5.2 per cent in 1979, 6.5 per cent in 1978 and 5.3 per cent in 1977 (in this respect India fared better with a growth rate of about 7½ per cent in real national income in 1980-81). The decline in the rate of their GDP emanated partly from the recessionary conditions prevailing in the industrial world. While the terms of trade of the oil exporting countries improved by 42 per cent in 1980, those for industrial countries deteriorated by 6.7 per cent and non-oil developing countries by 3.1 per cent.

The recession of the industrial world in turn adversely affected the growth of exports of the non-oil developing countries. Faced with the resources constraint, the level of development expenditure in these countries could not achieve the desired levels and resulted in reduced demand for domestic output. This whole process of retarding their growth was aided by the restrained monetary and fiscal policies. However, these policies could not control the inflationary forces. As a result, continued rise in the prices dimmed the growth prospects in that consumer prices during 1980 in the non-oil developing countries spurted by as much as 32 per cent as against 24 per cent in the previous year and 19 per cent in 1978.

It was against this background that the current account deficit of the non-oil developing countries had been steadily mounting during recent years and almost trebled from $ 29.000 million in 1977 to $ 82,000 million in 1980 and was likely to reach a new high of $ 97,000 million in the current year. As percentage of GDP this deficit steadily increased from 3 per cent in 1977 to 4.8 per cent in 1980. If the oil importing countries find themselves in a precarious position, oil exporting countries are flush with funds. Their current account surplus in 1980 amounted to $ 1,12,000 million and was likely to be of the order of $ 96,000 million in 1981. To finance a large current account deficit, non-oil developing countries were forced to resort to heavy external borrowings. Such debts increased by $ 47,000 million to $ 3,70,000 million during 1980.

India has also fallen a victim to the staggering rise in the international prices of petroleum and products. Its oil import bill of Rs 5,200 crores in 1980-81 accounted for nearly 80 per cent of its total export earnings leading to a staggering trade deficit of Rs 5,535 crores. Until recently, largely on account of the tremendous growth of income from invisibles (including inward remittances from Indians abroad), India enjoyed a comfortable balance of payments position. But there has been a change in that situation. Following deceleration in the inflow of income from invisibles and the continuing trade deficit, India has been facing payments difficulties. During the first five months (April-August) of 1981-82, the country's foreign exchange reserves have fallen by Rs 1,069 crores or at the rate of more than Rs 200 crores a month. The foreign exchange reserves of Rs 4,247 crores at the end of August were not enough to meet six months' imports (without the IMF loan of Rs 815 crores taken earlier reserves would have been just Rs 3,432 crores). It is in this context that India has approached the IMF for a loan of about $ 5,600 million. This is one instance how an oil importing country, even when it is somewhat better placed than some other oil-importing countries, finds it difficult to meet the external obligations in the present international economic situation.

The IMF's report observes that the positive relationship between the rate of overall economic growth and that of oil consumption in industrial countries seems to have weakened during recent years. While their real GNP increased by 1.2 per cent in 1980, energy consumption declined by 3 per cent. On trends in the more severely affected non-oil developing countries, unfortunately, the IMF has no comments to offer. It is rather mystifying that while commenting on the factors adversely affecting the output of non-oil developing countries, recession in the industrial countries is adequately played up as one of the factors contributing to the lower growth of the exports of non-oil developing countries, but there is not even a word about the rising protectionist policies of the industrial countries. If recession in the developed countries affected adversely the increase in real GDP in the non-oil developing countries, the protectionist policies of the former did even more.

India-Bangladesh parley

THE easing of tension in the relationship between India and Bangladesh over the New Moore Island which Bangladesh calls South Tallpatti is to be welcomed unreservedly. In the relations between the neighbours there are bound to be differing claims on contiguous territories and territorial waters. The interest of neither is served by keeping alive tension and conflict. Nor is it profitable to go into reasons that might have prompted one country or the other to come down from its belligerent pose. It has been suggested in some quarters that the Government of Bangladesh chose to discuss the matter with India after the decision had been taken to postpone the presidential election in deference to the wishes of the opposition parties and that this postponement had removed the necessity to continue the hate-India campaign, to boost which the controversy over the island proved handy. It may be so or may not be so. But that does not take away from the statesman-like visit of the Bangladesh Foreign Minister, Muhammed Shamsul Huq to this country to discuss an amicable settlement of the dispute.

It was well that there was no fixed agenda for discussion with the Bangladesh Foreign Minister. When disputes over small matters assume big proportions they signify a certain loss of mutual trust and confidence. Only through the restoration of the mutual trust the climate is made conducive for the settlement of specific disputes. Thus the entire gamut of the strained Indo-Bangladesh bilateral relations were covered during the discussions that Mr Huq had with the leaders of the Indian Government. The outcome of the talks was the decision of the two countries that the settlement of contentious issues like New Moore Island and Farrakka Barrage and the maritime boundary should be sought in a constructive and positive manner. The Indian Prime Minister, Mrs Indira Gandhi, made it clear to the visiting Bangladesh Foreign Minister that India wished to have close and friendly relations with Bangladesh and emphasised that the two countries should cooperate with each other to further the cause of peace and stability in the region, taking into account the long-term interest of the people of the two countries.

In the light of the conclusions arrived at the discussions held by the Foreign Ministers of Bangladesh and India, the foreign secretaries of the two countries would meet next month to re-examine all the available data and pave the way for an early peaceful solution to the New Moore — South Tallpatti Island that was causing tension. The foreign secretaries would also explore means of resolving all outstanding problems related to the land boundary including finalisation of the terms and conditions of lease-in-perpetuity of the Tin Bigha corridor. The foreign ministers of the two countries would also meet at an early date to resolve the Farrakka Barrage. The two foreign ministers agreed to intensify efforts to find a solution to the long-term problem of augmenting dry season flows of the Ganga in the context of the difference between the two countries over the Farrakka Barrage.

A disappointing aspect of the Indo-Bangladesh relationship is the slow growth in trade between the two countries where the potentialities are far from being fully realised. India is among the first five trading partners of Bangladesh. But then the total of Indian exports to Bangladesh amounted to only Rs 65 crores (India's total export trade amounted to Rs 6,814 crores during 1980-81) and imports from Bangladesh at Rs 10 crores (India's imports totalled Rs 8,908 crores) were even less. Indian exports to Bangladesh were higher during 1979-80 when these totalled over Rs 100 crores; but imports from Bangladesh during 1979-80 totalled just a little over Rs 5 crores. Indications are there that both the countries have come to see the gains they can make from an extension of the business connections with each other. There is reduced hostility to things Indian in Bangladesh since the flow of spurious and substandard goods through unscrupulous operators have ceased.

There is a welcome willingness among Bangladesh industrialists and businessmen to consider Indian technology, which has relevance for another underdeveloped country like Bangladesh, on merits rather than with a prejudiced eye, as they were wont to do until recently. For the Bangladesh conditions Indian products often are found to provide better service and reliability than products made by manufacturers in the more advanced industrialised countries. Some Indian products are even price competitive *vis-a-vis* those from other countries. A well-known Indian scooter manufacturing company assembles 3,000 scooter rickshaws in Chittagong. HMT has been given a licence to manufacture tube lights. Bangladesh is now the eighth largest importer of engineering goods from India. The newsprint and wet blue leather from Bangladesh are becoming quite popular in India. If the artificial trade barriers are removed both the countries would benefit from savouring a wider range of each other's products.

New oil finds

THE announcement by Mr P. C. Sethi about new oil finds, both onshore and offshore, is encouraging news at a time when the oil import bill continues to be crushing. The Petroleum Minister has reported the discovery of 80 sq km new oilfield, 35 km east of Bombay High, and three days later went on to announce oil finds in Tripura and Nagaland and discovery of oil in new wells in proven fields in Assam and Gujarat. The new offshore field is an indicator that further exploration of offshore areas could prove rewarding. Geologists have even otherwise calculated that of the geological oil reserves from the various sedimentary basins in India, 67 per cent are in the offshore and that of the total recoverable reserves onshore are about 40 per cent while offshore are estimated at 60 per cent. It should be possible for the Oil and

Natural Gas Commission to exploit the new finds off Bombay High without any difficulty. The well has shown an initial production of 1,030 barrels a day without acidisation and is therefore promising though the extent of reserves in the area will be known only after some more wells are spudded. The Government has already announced a programme to increase the offshore oil production to as much as 21 million tonnes by 1984-85. This, of course, does not take into account the new oilfield discovered off Bombay High or any new discovery that the Oil and Natural Gas Commission may make in the Godavari or other basins. The ONGC's activities in undertaking deep-sea exploration are hampered by the fact that it does not possess the sophisticated offshore rigs and specialised skills. But that should be treated by the ONGC more as a challenge to it than as a barrier to further progress.

Mr Sethi's announcement about the 'small finds' in the north-east region and Gujarat has raised hopes about the eastern region making a better contribution to India's total crude production than it does so far. The region contributed only 2.2 million tonnes to a total of 14.3 million tonnes produced by the dountry in the past year from onshore and offshore sources. Over the Sixth Plan period as a whole the total contribution from the region has been placed at only 10.8 million tonnes while between 1981-82 and 1984-85 the country's total output is placed at 58.14 million tonnes from offshore alone. To these is to be added 24.1 million tonnes from the onshore wells making a total of 82.24 million tonnes.

As for production plans, the Oil Ministry expects more than three million tonnes annually during the last two years of the Plan. If the Tripura and Nagaland finds turn out to be substantial, then the eastern region could supply more than three million tonnes to the national total per year and it will be interesting to know by how much more production can be raised in the next two to three years. Exploration work is also about to be taken up in the northern bank of Brahmaputra and the Sundarbans in West Bengal and, according to some oil experts working in the region, the Sundarbans could well throw up many pleasant surprises if systematic exploration work is done over a reasonable period of time. The Government has completed the takeover of Oil India and its properties in Assam and with this the nationalisation of the oil industry is complete. One direct result of the takeover will be the expansion of refining capacity in the eastern region. The Digboi refinery will be both modernised and expanded. A team of experts from Engineers India is already in Assam to make a detailed feasibility study of the expansion plan.

Limits to urban banks!

THE Reserve Bank of India is facing an embarrassing task in prohibiting new urban co-operating banks or new branches of existing urban co-operative banks in metropolitan centres with a population of ten lakhs and above and allowing them strictly on merits in urban and semi-urban centres with a population of less than ten lakhs. This is apparent from the apologetic and sometimes contradictory wording of the RBI circular and the press note. First, this is a temporary and somewhat *ad hoc* decision, since RBI has said that such a decision has been taken pending "the announcement of new licensing policy for commercial bank branches during the remaining years of the Sixth Plan." Obviously, the RBI has kept an exit valve open, in case too much political or co-operative opposition is generated against its decision. Secondly, the RBI has emphasised two aspects regarding its policies for urban co-operative banks. First is that before promoters of such new banks can expect to get a licence, they should fulfil formalities regarding share capital, number of members and the bye-laws. These are simple rules of mathematical ratios and are easy to understand and operate. As such most people must have believed that they can first get a licence to start a bank or open a branch by fulfilling these requirements. The RBI has warned them it is not enough to fulfil these rules and requirements to get a licence. In addition, promoters should satisfy the RBI on the second requirement that they also comply with the policy governing grant of licences.

There are three elements in such a policy. First the applicant bank should have a truly co-operative character with cohesion and commonality among the members or in the area of operations of the bank. Second, the bank must be urban and should not probe rural areas for additional business. Thirdly, the main purpose should not be to poach business from nationalised banks or gain control over the savings of the community. The first two requirements of this policy are not difficult to understand or fulfil. Urban co-operative banks should be urban and co-operative, no doubt about it. But the third requirement is difficult to comply, or even to understand. Any group of people who have cohesion or commonality are bound to belong to one social, economic, business, cultural or geographical function or area. If there is such a bond of common feelings or functions, they are bound to have control over their savings and some business is bound to be diverted from other commercial or nationalised banks.

The RBI has emphasised that just because an urban bank has the co-operative form, it will not get a preference over the commercial. This is very wise and sound. The real requirement is that the applicant bank should have skills, expertise and experience. This is also very wise and sound. In fact nobody would expect a licence for a bank if it does not have skills, expertise and experience. How is it that RBI has taken special pains to emphasise the obvious? The whole context and the apologetic tone of the RBI circular suggests that the real reason is that the RBI and government fear that urban co-operative banks are competing with the nationalised banks on the basis of their better efficiency and good customer service—and this is what hurts the nationalised banks. It is to protect these commercial banks and their inefficiencies that the RBI is going out of its way to curb the growth of urban banks.

LETTER FROM HONGKONG

A SPECIAL CORRESPONDENT

China: Changing banking scene

FOR nearly three decades after the founding of the People's Republic in 1949, China's banking system mainly played the role of a glorified bookkeeper and cashier for the country's Ministry of Finance, which under the State Council — Cabinet — defined the financial policies and laid down strict guidelines for their implementation. Such a system suited the interests of a highly centralised economy, where external trade remained marginal and foreign investment next to nothing.

But in recent years as China's economic policies have undergone a sea change, its banking system has also seen major structural transformation. In the domestic sphere as rational considerations began to dominate economic activity, the role of planners, financial bureaucrats and bankers started overshadowing those of ideologues. Instead of merely following orders and implementing instructions, they were put in charge of shaping policies to meet the requirements of the new economic directions.

On the international scene China's external trade doubled in the three years to 1980 and technological and economic co-operation with non-communist nations burgeoned, at the forefront of this activity being western bankers, industrialists and traders. Peking also became very active in the international agencies, with the highlight of 1980 coming when it finally joined the International Monetary Fund and the World Bank, having replaced the Kuomintang regime on Taiwan as the government representing the people of China.

After much revamping and reordering the lines of co-ordination, the principal financial institutions of China since 1979 are: People's Bank of China, Ministry of Finance, Agricultural Bank of China, General Administration of Exchange Control (GAEC), Bank of China and People's Construction Bank of China.

The Ministry of Finance, whose head is a member of the State Council and China's governor to the World Bank, is in charge of fiscal management and the central budget, both annual and long-term. It supervises the provincial budgets and is responsible for drawing up the national capital construction budget.

People's Bank of China ranks along with the Ministry of Finance as a member of the State Council. Its president is China's member of the IMF. It handles all domestic banking, except agricultural finance and new capital investments. It offers short-term loans to industry and commerce for working capital and replacement capital. With a staff of about 330,000 and a branch network reaching remote rural areas, its presence rivals that of any other government agency. It has a supervisory role over Bank of China, Agricultural Bank of China and GAEC.

Agricultural Bank of China, with its 23,000 branches, most of them in rural communes, extends farm credit, supervises rural credit co-operatives and accepts peasants' savings deposits.

People's Construction Bank of China, which was reestablished in 1979, comes directly under the State Capital Construction Commission which approves the projects and the Ministry of Finance, which provides the funds. Even if a project is cleared and funds are available, the bank can exercise considerable clout in examining the final feasibility of a project.

GAEC, works in conjunction with the Bank of China and is directly answerable to the State Council. It plans exchange control policies and implements those. It also sets foreign exchange rates of the Chinese *renminbi*, after due clearance from the People's Bank.

In 1980 there have been extensive discussions to establish an industrial-cum-commercial bank, to take over some of the functions of the People's Bank. The plan was to let the People's Bank concentrate only on its role as a central bank and the resultant monetary functions. Under the proposals the new bank would have specialised in providing working capital to industrial and commercial enterprises and term loans for replacement or renovation of capital plant and equipment. Although the proposals which called for the new bank to be set up b 1982, had a large measure of support the leadership has decided to shelve th issue as the pace of economic change an the bank lending, particularly for capita projects, has been so fast that a ne bank would compound the problems fur ther.

Along with banking, China's ne leaders have also paid attention in em phasising the insurance sector. For ove two decades the People's Insurance Cor poration of China (PICC) had been en gaged solely in marine cargo and expor insurance. But in 1980 it revived its do mestic market and with growing expor trade began seriously expanding the external insurance market also.

PICC's international business pre mium income in 1980 rose to 230 million yuan from 170 million the previous year, whereas income from reinsurance in 198 rose to US $150 million from US $120 million in 1979. In the domestic market the company's premium income in 1980 was 200 million yuan on the insured worth of assets totalling some 100 billion yuan.

Profit for 1980, including investments and interest in addition to operating profit was about 60 million yuan compared with PICC's profits for 1979 of 44 million yuan. Total assets of the insurance firm were put at 1 billion yuan at the end of 1980 as against 705 million yuan a year before.

Overseas, the PICC joined an international syndicate headed by Continental International in 1980 to deal in the New York market. Its sister left-wing firm Ming An Insurance of Hongkong has a similar tie up with American International Group of New York. PICC also has a stake in the UN sponsored Asia Reinsurance Corporation of Bangkok, which is supposed to serve the Third World members of ESCAP.

Considerable portion of PICC's profits are known to be invested in Hongkong's real estate sector.

Bank of China (BOC) which had been in the news in 1979 and 1980 as

Continued on page 506

IMF REPORT 1981—WORLD ECONOMY

Mounting debt burden of non-oil developing countries

Following are excerpts from the 1981 *Annual Report of the International Monetary Fund.*

THE world economic situation during 1980 and the first half of 1981 was difficult and disappointing in important respects. Nevertheless, signs of progress in dealing with some of the severe economic problems of recent years have begun to emerge.

For the past two years, dominant characteristics of the world economic picture have included the continuation of inflation at very high rates in many countries; the marked slowing of growth in the industrial countries, resulting in high unemployment and a slowdown in world trade expansion; and external imbalances on current account that have been both extremely large—reflecting major changes in terms of trade — and unusually volatile for some individual countries. Sharply increased deficits on current account have generated financing problems for many countries. Although international flows of credit through private market channels have been remarkably well sustained, a number of the non-oil developing countries, particularly among those with low per capita incomes and limited access to capital markets, have not obtained enough financing to sustain the growth of imports needed to achieve satisfactory domestic development.

A particular source of uncertainty and international concern during 1980 and the first half of 1981 was the prevalence of very high rates of interest, in real as well as nominal terms. These interest rates resulted from the interaction of firmer monetary restraint in a number of the industrial countries with the momentum of the ongoing inflation after a long period of generally inadequate fiscal restraint. Although there are sound theoretical and practical reasons to anticipate a substantial decline in nominal interest rates when inflationary expectations subside, the absence of a reliable basis for gauging the timing of any such change in expectations has tended to maintain uncertainty about the prospects for interest rates.

Meanwhile, the present levels of real interest rates are creating a drain on the international purchasing power of most net debtor countries. This problem is especially serious for the non-oil developing countries at a time when their international purchasing power is already under pressure because of deterioration in their terms of trade, weak markets for their exports, and relatively slow growth in flows of concessional assistance to low-income countries. Any decline in nominal interest rates in major financial centres will be rather quickly reflected in the nominal value of external interest payments by developing countries relying heavily on market finance (because of the prevalence of flexible interest rates—linked to London market rates—on a considerable proportion of their outstanding debt). However, any such decline might be short-lived if inflation and inflationary expectations are not curbed. In view of the imperative need for the industrial countries to control inflation, there seems to be a strong prospect that real interest rates will remain well above the abnormally low or negative levels of the 1970s. The likelihood that external borrowing will remain more costly in real terms than it has been for many years underscores the need for prudent adjustment measures in many of the borrowing countries.

Among the encouraging aspects of the world economic situation at mid-1981 were indications that the inflationary surge of 1979 and 1980 has abated. An opportunity is now presented for its reversal. Monetary expansion in the major industrial countries has been considerably restrained, and might be brought under lasting control if policies of restraint are not relaxed prematurely and are accompanied by appropriate fiscal policies. Although the desired results of firmer monetary control can appear only with an uncertain lag, substantial progress has been made toward establishment of a monetary environment conducive to more stable prices.

One of the obstacles to achievement of a less inflationary monetary environment is clearly the prevalence in many countries of government expenditures at levels beyond those which the public is willing to cover through payment of taxes. The resultant fiscal deficits have made governments strong competitors in credit markets, and have thus contributed to the upward pressure on interest rates. Here, too, however, a considerable shift in direction seems to be in process. Most governments in the larger countries are engaged in strenuous efforts to tighten their fiscal policies, and some of them are working to limit or reduce the role of government in the economy. These efforts do not appear to have been made in vain. With allowance for the more or less automatic effects of the current international recession on both revenues and expenditures, fiscal positions have been appreciably less expansionary in this recession than they were in the 1974-75 recession.

An indication that the more restrained financial policies of the past two years have not been ineffectual is the flattening or deceleration of price increases in a number of countries since the first half of 1980. This development, which has recently been offset in a number of countries by the impact of currency depreciation on import prices, is in part a reflection of the relative stabilisation of oil prices after two years of large increases. However, the incipient tapering of inflation rates also reflects a considerable degree of success, in most of the industrial countries, in containing secondary repercussions of the 1978-80 upsurge in energy costs. In this respect, adjustment to the latest round of oil price increases has been much better managed than was the adjustment of the mid-1970s. In particular, the rise in wages has been distinctly more moderate in relation to current increases in consumer prices during the period 1978-81 than it was following the oil price increases of 1973-74.

A related development of hopeful significance is that the former close linkage between economic growth and oil consumption appears to have been severed during the past few years. After a decline of 3 per cent from 1979 total energy consumption in the industrial countries during 1980 was approximately the same as in 1973 despite a 19 per cent growth of real gross national product (GNP) over the period. In addition, more rapid substitution of non-oil sources for oil has emerged in recent years. Consumption of non-oil energy in the industrial countries is estimated to have risen by 7 per cent from 1978 to 1980, compared with an 8 per cent decline in the consumption of oil. These developments both reflect and support the policy that has now been adopted in most industrial countries of allowing a full pass-through of oil price increases so as to encourage conservation of energy and substitution of alternative energy sources for oil.

Another reassuring aspect of developments over the past two years is the smooth fashion in which the recycling of the large cash surpluses accumulated by the oil exporting countries has been carried out, mainly through private market channels. Many borrowing countries, despite the rise in real costs of credit, have gained valuable time for adaptation and adjustment through the continuation on a large scale of international lending by private financial institutions. Private facilities have been supplemented by expanded activities of international agencies, including the Fund; and the Fund, in particular, now has in place and in prospect arrangements that permit further enlargement of its role. Member countries making sufficiently strong efforts to adjust their external payments imbalances may be permitted to draw on Fund credit up to 450 per cent of their newly increased quotas over a three-year period (subject to a cumulative ceiling of 600 per cent of quota), not counting any drawings under the low-conditionality facilities for compensatory and buffer stock financing.

At the end of June 1981, upper credit tranche and extended arrangements were in effect with 39 members, about four times as many as (on average) during the five years preceding 1979, and they involved large sums. During 1980, new loan commitments and other use of Fund resources reached a total of SDR 9.5 billion, some two to three times the level of previous years; and the corresponding total for the first half of 1981 alone was even larger — nearly SDR 10 billion. The programmes underlying these figures offer solid grounds for hope that orderly adjustment toward viable external positions for the longer run will be widely carried out.

Non-oil developing countries

A wide variety of domestic developments was evident in 1980 and the first half of 1981 among the non-oil developing countries. In the discussion that follows, an effort is made to depict some of the salient distinctions within this group of some 110 countries by focusing attention on selected analytical and regional subgroups.

For the group as a whole, 1980 was a year of high inflation and reduced growth in output. The average increase in real GDP was a little less than 5 per cent, compared with 5¼ per cent in 1979 and 6½ per cent in 1978. All these figures are increased appreciably by the inclusion of data for the People's Republic of China, which was not covered in previous Annual Reports and for which data are available only from 1977 to date. Apart from that country, the average 1980 growth rate was about 4½ per cent, considerably below the average of close to 6 per cent for non-recession years of the late 1960s and 1970s.

At least in part, this shortfall was a reflection of the impact of the current recession in the industrial countries, which has markedly affected the predominant markets for exports of the non-oil developing countries. The recession has tended not only to inhibit the expansion of export volume but also to exert a progressively stronger downward influence on primary commodity prices. The index of such prices (expressed in US dollars) rose substantially less rapidly in 1980 than in the previous year; and it declined in most months from October 1980 through June 1981. The combination of slower growth of export volume and falling terms of trade cut into the purchasing power of export earnings, and a rising share of those earnings was diverted into interest payments on external debt.

For many developing countries, the inflow of real resources obtainable from abroad was thus limited, despite a sharp expansion in the net flow of funds acquired through foreign borrowing. Confronted with a squeeze on the total availability of resources for consumption and investment, some of the affected countries were unable to avoid constraints on the pace of their developmental spending, and these constraints reinforced the negative impact of the international recession on total demand for their domestic output.

During the latter part of 1980 and the first half of 1981, another factor tending to retard the expansion of output in many developing countries was the emergence of more restrained fiscal and monetary policies. Such policies were adopted to combat inflation, or to curb import demands and external deficits on current account, or both. To some extent, the slowing of growth now in process thus reflects implementation of adjustment measures made necessary by the prevalence of internal and external imbalances. However, the shifts away from accommodative financial policies came generally too late to prevent a worsening of inflation for 1980 as a whole. That year's monetary expansion in the non-oil developing countries was larger by about one fifth, on average, than the corresponding expansion in 1979.

Growth of domestic credit, to which the progressive increases of recent years in the average size of central government fiscal deficits have contributed, was the primary force behind the 1980 acceleration in rates of monetary expansion and price inflation. These developments reflected the efforts of many non-oil developing countries to maintain adequate growth in the face of soaring import costs and softening of export markets. Such efforts, however, often came into conflict with other objectives. The tightening of financial policies that began in many countries during the latter part of 1980 appears, as already mentioned, to represent a shift toward renewed emphasis on containment of inflation and of external imbalances.

Slack demand in the industrial world was also a factor in the relatively weak rates of growth in real GDP recorded in 1980 for both the middle-income exporters of primary products and most of the low-income countries (whose exports, in most cases, also consist mainly of primary products). This weakness was especially marked for the numerous small countries in the low-income group. Although the growth rate for that subgroup as a whole was bolstered in 1980 by comparatively sizable gains in the two largest low-income countries (the People's Republic of China and India), real GDP expansion in the other 38 low-income countries is estimated to have amounted to only 3 per cent in 1980. For them, it was the second consecutive year of growth at that disappointingly low rate, barely sufficient to prevent complete stagnation of per capita income. Even with higher increases for China and India included, the average per capita increase in real income in the low-income countries — which contain some two thirds of the population of the entire developing world — was not much above 2 per cent in 1980.

The economic record of the non-oil developing countries in 1980 was marred by another sharp rise in the rate of inflation, which had already turned upward in 1979. As measured by a weighted average of consumer price increases, the inflation rate for the whole group reached 32 per cent in 1980, compared with 24 per cent for the previous year and 19 per cent in 1978. This disturbing flare-up of inflation reflected both the sharp rise in costs of imported goods and the pursuit of expansionary financial policies by a majority of the non-oil developing countries during 1979 and part of 1980. However, as already noted, a shift away from strongly expansionary policies has become evident in many countries over the past year. If the numerous adjustment programmes that have been instituted with a view to improving both internal demand/supply relationships and external balances are appropriately implemented, some easing of the average rate of inflation among non-oil developing countries in 1981 would seem likely.

International trade and payments

International trade and payments developments of the past two years featured unusually pronounced changes in the terms of trade of major groups of countries, large swings in their current account balances, with accompanying shifts in capital movements, and substantial changes in exchange rates, including wide short-term variations in response to changes in monetary conditions and interest rates in the major industrial countries. These changes occurred against a background of continuing high — and quite uneven — rates of inflation and, during 1980 and the first half of 1981, very slow growth of world trade.

The relative importance of sources of change in the terms of trade in the past two years can be inferred from the following : the terms of trade of the oil exporting countries rose by 28 per cent in 1979 and another 42 per cent in 1980 those of the industrial countries fell by 3 per cent in 1979 and 6½ per cent in 1980; and the terms of trade of the oil importing developing countries were reduced by about 8½ per cent over the two years. (Because the non-oil terms of trade of this last group displayed moderate cyclical strength in 1979, but were cyclically weak during the last two or three quarters of 1980, the group's overall terms of trade deterioration over both years was concentrated in the second).

Mainly in reflection of changes in terms of trade, but under the influence also of the cyclical slowdown in world trade stemming from the recession in the industrial countries, swings in the current account balances of major groups of countries in 1979 and 1980 were by far the largest since the middle 1970s. From 1978 to 1980, the increase in the current account surplus of the oil exporting countries amounted to nearly $ 110 billion, while the current account balance of the industrial countries shifted by $ 75 billion in the opposite direction — from a surplus of $ 31 billion (excluding official transfers) in 1978 to a deficit of $ 44 billion in 1980 — and the aggregate current account deficit of the non-oil developing countries more than doubled, to $ 82 billion.

The aggregate current account deficit of the non-oil developing countries was pushed upward dramatically in 1979 and 1980. By the latter year, it had reached $ 82 billion, compared with $ 38 billion in 1978; and a further increase to $ 97 billion is projected for 1981.

For the main group of oil importing countries, the impact of declining terms of trade and reduced export volume growth on the real import purchasing power of export earnings has been severe — indeed, for the low-income countries, almost devastating. Even for the whole group of net oil importers, including the relatively prosperous exporters of manufactures, the rise in purchasing power of exports* dropped to 1 per cent in 1980, compared with 5 per cent during each of the previous two years and well over 10 per cent in the period of buoyant primary commodity prices (1976-77). And for the low-income countries, the purchasing power of export earnings actually declined by about 6 per cent in 1980, after having already undergone a cumulative decline of almost equal magnitude during the preceding two years. The only group of non-oil developing countries with buoyant export earnings expressed in terms of external purchasing power was the subgroup comprising net exporters of oil.

The foregoing considerations explain to a considerable extent both the marked reduction of real import growth for the entire group of non-oil developing countries in 1980 and the sharp contrasts among the main subgroups of such countries with respect to import trends. Even though many countries borrowed heavily of the long-term and medium-term components of such debt (including rough estimates of private debt without a guarantee from the authorities of the borrowing country — a component not covered in previous annual reports) indicate a total of $ 370 billion at the end of 1980, nearly $ 100 billion above the amount outstanding at the end of 1978 and more than 3½ times the end-1973 total. These nominal comparisons, however, do not give a meaningful view of the scale of changes in debt over a period of high inflation and substantial real growth. A more realistic notion of the changes in the scale of the debt can be obtained by comparing it with other basic economic variables that also reflect inflation and growth.

All three major country groups experienced increases in their holdings of total reserves excluding gold in 1980. For the industrial countries, holdings of non-gold reserves grew at approximately the same rate (20 per cent) as the average for all countries. The major oil exporters increased their holdings by 32 per cent, while those of the non-oil developing countries increased much more slowly, by 4 per cent. For the latter group of countries, this was a much slower rate than in 1979 (11 per cent) or 1978 (21 per cent). The sharp reduction in the growth of the reserves of non-oil developing countries as a group accompanied the weakening of their external payments positions resulting from such causes as cyclical factors affecting export receipts higher import costs, and increased debt service. The development of non-gold reserves was even more unfavourable for some subgroups of developing countries those of the low-income countries declined by 5 per cent and those of the group of major exporters of manufactures fell by 10 per cent in the course of 1980.

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*That is, the value of export earnings deflated by an appropriate index of import prices.

Payments balances on current accounts, 1973-81

(In billions of U S dollars)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Industrial countries	19.7	—11.6	17.6	—0.2	— 4.6	30.8	— 7.8	—44.1	—29
Seven larger countries	14 1	— 3 7	23 2	9 1	8 0	34.2	4.7	—15.7	— 1
Other countries	5.5	— 7.9	— 5.5	— 9.3	—12.6	— 3.4	—12.5	—28.4	—28
Developing countries									
Oil exporting countries	6.6	67.8	35.0	40.0	31.1	3.3	68.4	112.2	96
Non-oil developing countries[8] ..	—11.5	—36.8	—46.5	—32.9	—28.6	—37.5	—57.6	—82.1	—97
By area									
Africa	— 2.0	— 4.8	— 9.2	— 8.0	— 6.0	— 7.3	— 5.8	— 7.3	—14
Asia[3]	— 2.5	— 9.8	— 9.0	— 3.5	— 0.7	— 5.8	—14.1	—23.7	—25
Europe	0.3	— 4.3	— 4.7	— 4.1	— 7.6	— 5.2	— 8.5	—10.3	— 9
Middle East	— 2.6	— 4.5	— 7.0	— 5.4	— 5.2	— 6.3	— 8.3	— 7.7	— 8
Western Hemisphere ..	— 4.7	—13.4	—16.6	—11.9	— 9.1	—12.9	—20.9	—33.1	—40
Total[4]	14.8	19.4	6.1	6.9	— 2.1	— 3.4	3.0	—14.0	—30

1 On goods, services, and private transfers. Projected 1981 balances including official transfers are $50 billion for the industrial contries as a group, $18½ billion for the larger countries, and $31½ billion for the other industrial countries.

2 Fund staff projections.

3 Excludes data for the People's Republic of China prior to 1977.

4 Reflects errors, omissions, and asymmetries in reported balance of payments statistics plus balance of listed groups with other countries (mainly, the Union of Soviet Socialist Republics and other non-member countries of Eastern Europe and, for years prior to 1977, the People's Republic of China).

Non-oil developing countries : Long-term external debt,. 1973-80**

(In billions of US dollars)

	1973	1974	1975	1976	1977	1978	1979	1980
Total outstanding debts of non-oil developing countries	97.3	120.6	147.1	175.6	216.7	272.7	322.8	370.1
By type of creditor								
Official creditors	49.1	59.3	69.3	81.2	97.8	117.8	134.8	155.8
Governments	36.9	44.2	50.4	58.5	68.9	81.6	92.1	106.0
International institutions	12 2	15 2	18 8	22 7	28 9	36 2	42 8	49 8
Private creditors	48 3	61 2	77 9	94 4	118 9	154 9	188 0	214.3
Unguaranteed debt	21.4	26.0	32.0	37.5	43.1	51.4	60.7	68 2
Guaranteed debt	27 0	35.2	46.0	57.0	75.8	103.5	127.3	146.1
To financial institutions ..	13.1	21.7	29.8	39.0	54.3	73.9	96.1	112.8
Other private creditors	13.8	13.5	16.1	18.0	21.5	29.6	31.2	33.3
By area								
Africa	12.9	15.7	19.7	23.8	31.1	38.3	42.9	47.8
Asia	27.0	31.5	36.7	43.5	52.7	62.6	72.0	85.0
Europe	12.2	14.6	16.7	19.6	24.9	33.1	45.5	52.7
Middle East	8.5	10.1	13.1	16.0	20.3	24.6	28.6	32.1
Western Hemisphere	36.7	48.6	60.9	72.7	87.7	114.1	133.9	152.5
By analytical group								
Net oil exporters	15.6	20.7	31.0	38.8	50.4	61.5	68.7	77.4
Net oil importers	81.7	99.9	116.1	136.8	166.2	211.2	254.2	292.6
Major exporters of manufactures ..	38.9	47.6	56.3	66.9	80.7	107.9	128.6	143.0
Low-income countries	21.6	25.8	29.1	34.0	40.2	46.2	52.3	60.7
Other net oil importers	21.2	26.5	30.7	35.9	45.3	57.1	73.3	88.9

** Excludes data for the People's Republic of China prior to 1977.

The role of Fund liquidity in the international monetary system

Provision of liquidity, unconditional and conditional, is one of the principal functions of the Fund. Unconditional liquidity is supplied through the allocation of SDRs and, as a by-product of the extension of Fund credit, through the growth of reserve positions in the Fund. Conditional liquidity is made available through the Fund's various lending programmes and facilities. In allocating SDRs, the Fund directly provides reserve assets under rules set out in the Articles of Agreement; this topic is related to the discussion of the preceding section and will, therefore, be taken up first.

Unconditional liquidity

The characteristics of the SDR have been considerably improved during the last year. Since January 1, 1981, the SDR is based on a new currency basket, containing five major currencies, which is used to determine both the value of the SDR interest rate. With effect from May 1, 1981, the SDR interest rate was increased from 80 per cent to 100 per cent of the combined market interest rate (the weighted average of short-term market yields in the five countries whose currencies are in the SDR basket). At that time, the reconstitution requirement on SDR holdings was also eliminated (with effect from April 30, 1981). These measures improved the asset quality of the SDR and enhanced the role of the SDR in the international monetary system. As a result, there has been further development of the private market in financial assets denominated in SDRs. The SDR has also been increasingly used by other international institutions, and most recently the International Bank for Reconstruction and Development, the International Development Association, and the Central Bank for West African States have been prescribed as authorised holders of SDRs.

With the final allocation (SDR 4 billion) for the third basic period at the beginning of 1981, there has now been a cumulative allocation of SDR 21.4 billion. The fourth basic period starts at the beginning of 1982. As of June 30, 1981, consensus with respect to SDR allocation in the fourth basic period had not yet been reached, and, as provided in the Articles of Agreement, the Managing Director has made a report to the Board of Governors and to the Executive Board indicating that as of that date he was not in a position to make a proposal regarding allocations during the fourth basic period that has broad support among Fund members. At its meeting in Libreville, Gabon, in May 1981, the Interim Committee urged the Executive Board to continue its deliberations on the subject to enable the Managing Director to submit to the Board of Governors at the earliest possible date a proposal that would command the necessary support among members. In reaching decisions on allocation, the Fund is guided by certain provisions of the Articles of Agreement, which require that there be a long-term global need to supplement existing reserve assets and that SDR allocations be consistent with the objective of avoiding economic stagnation and deflation as well as excess demand and inflation in the world. Moreover, the size of SDR allocations has significance for the objective of making the SDR the principal reserve asset in the international monetary system.

As has been discussed earlier, the rapid growth of non-gold international reserves that has occurred in recent year has primarily taken the form or large foreign exchange holdings. Accordingly the share of cumulative SDR allocation in total non-gold reserves declined from 10.5 per cent at the beginning of 1972 just after the last allocation of the firs basic period, to 6.6 per cent at the beginning of 1981. Past experience indicates that, with the expansion of internationa transactions in goods, services, and financial assets, further growth of international reserves is likely to occur. A large part of the total reserve increment wil certainly be generated through international financial markets. If a portion o the required reserve increment were, however, to take the form of allocated SDRs this could satisfy part of the rising demand for reserves without depending o international credit markets; it could als accommodate some tendency toward asset diversification without adding to existing pressures in foreign exchange markets and help to maintain the position of the SDR relative to other reserve assets in the international monetary system. In the present circumstances of the world economy, characterised by sluggish growth and entrenched inflationary pressure, it is of course important that decisions on SDR allocation avoid giving wrong signals to the private sector while aiming at the objectives discussed above.

Conditional liquidity

Members' quota subscriptions are the basis source of funds used for the extension of conditional credit by the Fund. A country making use of the Fund's resources is generally required to undertake an economic programme designed to achieve a viable balance of payments position over an appropriate period of time. The criteria for the provision of

Fund support are uniform for all members, in the sense that all members in a particular situation are entitled to receive the same treatment, given their needs and their adjustment efforts. The Fund recognises that to rectify a country's balance of payments position may, under present circumstances, require structural changes and that these adaptations may take longer than the one to three years normally set for Fund programmes. While macroeconomic policies must ensure that the demand for resources is kept in close balance with supply, increased attention has been devoted to the impact of policy measures on the incentives and the capacity to augment supply. To this effect, collaboration with the International Bank for Reconstruction and Development has been intensified. In addition, since payments imbalances are now often large relative to quotas, the Fund has taken steps to enlarge access to its resources. As a general norm, and apart from drawings under certain low-conditionality facilities, members may now use the Fund's resources up to 150 per cent of their new quotas in any year and up to 450 per cent over three years, with a cumulative limit of 600 per cent of quota.

To ensure that there are adequate funds available to support members' adjustment programmes, the Fund has periodically increased its quotas and, when necessary, made use of borrowing facilities. Quotas were increased by 50 per cent as a result of the Seventh General Review of Quotas, which became effective in November 1980. In addition to this general quota increase, some members had special increases, chiefly the major oil exporting countries. Most recently, the Saudi Arabian quota in the Fund was doubled to SDR 2.1 billion and the quota of the People's Republic of China was increased to SDR 1.8 billion. It has been decided that the Eighth General Review will be the occasion to review the criteria by which quotas are calculated and to reflect in the quota structure the evolution in members' positions in the world economy.

While work has begun on the Eighth General Review, it may be some time before the Fund obtains sufficient additional resources from quota subscrip-

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SOUTH ASIA REVIEW

Pakistan's explosive population growth

By B. M. BHATIA

LIKE many other Third World countries, Pakistan continues to face a serious demographic situation. The annual growth rate of population continues to be around 3 per cent which is among the highest in the world. The initial results of the 1981 population census of the country released at the press conference by the secretary, statistics division, Syed Munir Hussain, on July 29 this year, have come as a shock to those who had pinned their faith in the efficacy of family planning measures taken by the government and had hoped that growth rate of population would turn out to be no more than 2 per cent at the 1981 census.

The present census held in the first half of March this year, has been taken eight and a half years after the last census which because of Bangladesh crisis and subsequent separation of eastern wing from West Pakistan, had to be postponed from February 1971 to last quarter of 1972. The latest census shows that in the interval of 8½ years between the two head counts, 18.4 million persons have been added to the total population of the country. The increase works out at 28.8 per cent for the period or 2.98 per cent a year at a compound annual rate. This means that the earlier growth rate of 3 per cent per annum has been maintained and, population planning measures have failed to make the least dent into the problem of population explosion. If the population continues to grow at the present rate, the country might well have a population of 135 million by the end of the century. At the time of partition, population of West Pakistan which means whole of present Pakistan was only 51.2 million.

Another demographic feature underlined by the latest census data is the growing urbanisation of the country. The proportion of urban to the total population rose from 25 per cent at the last to 28.28 per cent at the latest census. The increase in urbanisation is not necessarily an indicator of economic progress of the country. At least not in the case of Pakistan. Urbanisation in that country is the effect of an unnatural expansion of tertiary sector that is unwarranted by the level of industrial growth there. According to the growth theory as well as all development experience, expansion of tertiary sector of an economy comes as a result of industrialisation and is a consequence of that development. In the case of Pakistan, the development of tertiary or service sector has preceded and outstripped that of industrialisation.

The share of tertiary sector in the gross domestic product at constant factor cost has gone up from 42 per cent in 1959-60 to 45 per cent in 1969-70 and 52 per cent 1979-80. Against that, the share of agriculture in the gross domestic product has declined correspondingly from 45.8 per cent in 1959-60 to 39 per cent in 1969-70 and 31.5 per cent in 1979-80. The share of manufacturing which includes small scale industries and traditional handicrafts has meanwhile moved up tardily from 12.2 per cent in 1959-60 to 16 per cent in 1969-70 and 16.5 per cent in 1979-80. Obviously, the tertiary sector has grown at the cost of agricultural sector and not as an end product of industrialisation which was the case with industrially developed countries.

Apart from that, urbanisation in a country which has a narrow industrial base has various other disadvantages. Pakistan at its inception, had only two big cities, Karachi and Lahore, and less than a dozen big towns. The population in most of these has grown five-fold over the last thirty years but the growth of civic amenities has been nowhere near even half that rate. Thus Karachi has now a population of 5.2 million (some say it is 10 million) compared to one million at the time of formation of Pakistan, and Lahore 2.92 million compared to 5 lakh in 1947. Faizabad (formerly Lyallpore) today boasts of a population of 1.09 million compared to little over one lakh at the time of partition. The story of Rawalpindi with its present population of 9,28,000, Hyderabad (Sind) 7,95,000, Multan 7,30,000 Gujranwala 5,97,000, Peshawar 5,55,000 Sialkot 2,96,000, Sargodha 2,94,000 and Quetta 2,85,000, is the same. Only Islamabad with a population now of 3,35,000 is a new city where civic amenities have been planned to correspond to the growth of needs for them over time.

Everywhere else, the growth of cities and towns in the country has proceeded in an unplanned manner with the result that population has everywhere outstripped the supply of such elementary amenities for the citizens as drinking water, proper drainage, adequate housing, health care facilities and schooling for the children. The old cities and the towns are now bursting at the seams. This not only causes severe strain on the public exchequer in finding funds for providing the ever-growing needs of the urban population but also generates economic and social tensions. Sind is the most urbanised of the four provinces of Pakistan; 43.4 per cent of its population was found to be living in urban areas at the 1981 census. At the other extreme are the two frontier provinces of N.W.F.P. and Baluchistan in

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which 85 per cent of the population still is rural.

Punjab which is the most populous of the four provinces but has shown the lowest growth rate of population among the four provinces in the last decade, has 17.8 per cent of the population living in the urban areas. The following table shows the population at the 1981 census and the percentage increase in each case over the previous census figure in the four provinces, the Federally Administered Tribal Area (FATA) and in the capital city of Islamabad.

	Population (in million)	Percentage increase over 1972
Punjab	47.11	25 28
Sind	18.96	33 98
NWFP	10.885	29.77
Baluchistan	4.30	77.23
F.A.T.A.	2.175	N.A
Islamabad	0.335	42.55

More than 55 per cent of the population of the country lives in Punjab which is the most populous of the four provinces. The overall density of population for the country as a whole is 105 per square kilometre which is rather low. But this is accounted for by the fact that because of the rocky and barren terrain in N.W.F.P. and Baluchistan the two provinces are sparsely populated. The density of population in Baluchistan, for instance, is no more than 12 at present compared to 7 at the 1972 census. Against that, density of population in Punjab now stands at 229 compared to 183 at the 1972 census. The density of population in Sind which was 100 in 1972 has now risen to 134 and that in NWFP from 113 to 147.

Uneven distribution of population among the four provinces represents unequal distribution of national income and political power among them. Punjab has remained from the very outset, economically the most developed and richest, and politically the most dominant of the four provinces. Punjabis are the most articulate of the country's population and they form the biggest single element of the nation's ruling elite. This is one of the factors that inhibit growth of a true national unity and federal polity.

Land-man ratio in Pakistan is still far more favourable than in most of the neighbouring developing countries. Also a considerable amount of irrigation and power potential of the country still remains to be exploited. But the availability of large untapped resources cannot provide much comfort to the country's planners and policy makers. For one thing, these resources have been there with the country for the last 34 years. If little progress has been made so far in exploiting these, it is because massive investments are required to utilise the available potential. The funds needed for the purpose simply do not exist nor is there any hope for the country getting these from abroad. Secondly, the past performance of country's leadership in the matter does not encourage hope for the future. The untapped resources have been there "with us over the years, but the effort to harness them and accelerate the pace of progress has always been tardy", laments a Pakistan weekly. The country's leadership had all its development priorities wrong: it encouraged the development of consumer goods manufacturing industries which yielded for more than a decade spectacular growth rate results, but neglected agriculture in which the country enjoyed a considerable degree of comparative advantage over the neighbouring countries including India. There is no indication even now of the country having learnt its lessons from the failure of its past strategy of development and reversing its priorities in its development plans.

In the circumstances, population control policy acquires much greater significance and urgency today than ever before for the country. But the traditional methods of family planning would not do. That seems to be the latest thinking on the subject by the policy-makers. A new three year plan has, therefore, been drawn up and is being implemented. The plan aims at improving the living standard of the masses in the belief that such improvement would help to reduce the birth rate. The details of the core plan have not been published yet but it is confidently hoped that the "core" programme, which will be supplemented by the effort of each provincial government, will help raise the level of "effective knowledge" from 33 per cent to 55 per cent by 1984 and raise the level of current practice of family planning from an estimated 12.5 per cent to 25 per cent at the end of the three-year period. The plan aims at bringing down birth rate from the present 41 per thousand to 37.5 per thousand over the three-year period. The results of this novel experiment in Pakistan in population control through raising living standards of the poorer sections of the population will be watched with greatest interest by governments and peoples of the developing countries.

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Soviet Union meets China in Nepal

By **BRAHMANAND MISHRA**

THERE was a time when in India as also elsewhere there existed a general belief that India was meeting China in little Nepal. In recent years, however, the situation appears to have changed drastically. Now, it is the USSR and not India which meets China in Nepal.

Till recently the Indian mission in Nepal—inclusive of personnel from both, the Indian Embassy and Indian Cooperation Mission—was considered the second largest Indian mission abroad, first being the Indian High Commission in London. But today India maintains only a skeleton staff of what it had there earlier. As a result the designation of the director of the Indian Co-operation Mission has changed. Now there is a liaison officer who functions not from Haribhawan but from the premises of the Indian Embassy with mere three hands in his office to assist him. The chief engineer of the erstwhile Indian Cooperation Mission (ICM) has been withdrawn. While the Butwal and Nepalganj circles are still there, the acting engineer made responsible to complete the remaining projects functions from New Delhi.

The net result has been that all the joint projects for which agreements between New Delhi and Kathmandu were reached during the Janata Party days are put in the cold storage. The handing over of Rs 10-crore Surajpura hydel project, built by Bihar Government across the Gandak river canal, under the Indo-Nepalese treaty of friendship has been against this background. On August 31, the Prime Minister of Nepal, Mr Surya Bahadur Thapa pressed a button to mark the formal taking over of the 15 mw-power house. Observers in Kathmandu believe there would be now many such handing and taking over functions in the coming months when, as was done on this occasion at an impressive function attended by ministers and diplomats be-

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sides 10,000 people, the historic ties binding India and Nepal would be reaffirmed.

India's quiet exit from Nepal has come at a time of Russia's entry into Nepal. The Russian entry has not been so quiet. The Nepalese mind became agitated this summer when *Jan Marg,* a Nepalese language weekly, came out with a startling story that the Soviet embassy in Nepal had brought into the kingdom two truckloads of powerful communications equipment. Later a German news agency quoting reliable sources reported from Kathmandu that there were actually four truckloads. The trucks had come from Calcutta accompanied by two Russians. Due to the suspicious nature of the cargo containing 84 crates, the Nepalese customs authorities at Birgunj, contacted the Nepalese Foreign Ministry. The shipment was detained for over two weeks while the matter was discussed at the ministry in Kathmandu and personnel from the Soviet embassy were rushed to Birgunj to keep a 24-hour watch over the consignment. The crates were reportedly released without customs inspection after the Soviet embassy presented a manifest which reportedly said that the crates contained construction materials for the embassy building which has been under construction for the past over three years.

It is said that the shifting of the Soviet embassy at Baluatar from Dilli Bazar was itself an after-thought after the Chinese had undertaken construction of their permanent embassy at Bhath Bhatenee, overlooking the huge flat land occupying hundreds of acres of Baluatar from where a large number of Nepalese farmers have been uprooted after the Soviets had bought it. On way to Baluatar. while one can see the Chinese embassy's main building because of the low walls—compared to its former building at Naxal, with a Chinese flag atop the building with one hundred rooms, the Soviet embassy at Baluatar, remains a closed show. The *Jan Marg* report had come soon after the detention of sophisticated communications equipment allegedly taken illegally into Bangladesh by the Soviet embassy in Dacca.

Incidentally the present ministry led by Mr Surya Bahadur Thapa is suspected of having a soft corner for the Soviet Union. It is said it was perhaps because of the Prime Minister leaning towards the Soviet Union that the entry of Mr Randhor Subba in the Nepalese cabinet was barred. After the grand success of the Partyless Panchayati group in the last general elections considering Mr Subba's experience and performance, political observers in Kathmandu took it as almost certain that the new government will name him the kingdom's foreign minister. Now it is said his entry was barred because of his known pro-Peking stand, which would not have been to the liking of Soviet Union.

What has forced India to withdraw from the scene quietly, the observers believe, is growing anti-Indian feeling, which was forcefully blown up under the primeministership of Kirtinidhi Bista in late sixties. At a time when polarisation of forces started taking place the world over, they say, for avoiding further embarrassment, New Delhi might have considered it safe to withdraw quietly. Whatever might have been the compulsions of New Delhi to take this step the fact that both India and Nepal have a shared destiny still remains unchallenged. According to Mr Bruno Knall, director, Sud-Asien Institute (Institute of South Asian Studies) Heidelberg, West Germany, Nepal's trade with India is by far much more important to it and there should be no politics or emotionalism in this respect. Mr Knall, currently a visiting professor at the Tribhuvan University, Kathmandu, has said that a spectacular increase in Nepal's trade wit
other countries was to a large extent du
to diversion of trade with India. Ther
is scope for more trade within the region, consumption patterns and qualit
expectations for products being simila
unlike in the case western countries. M
Knall felt that a better climate can b
achieved only if the Indian Government shows a more practical and development oriented attitude to Nepal i
matters of trade and cooperation and i
both the parties look at bilateral economic relations in a "more business-lik
manner". But one should not overloo
the fact that the bilateral trade is by fa
more important to Nepal than to India
Mr Knall suggested that Nepal shoul
evolve an integrated foreign trade polic
and dovetail the efforts at economi
diversification into it.

The foreign trade statistics sinc
1956-57 showed that trade with India
remained pre-eminent for many years
Nepal's trade with overseas countries
which was less than 5 per cent in 1968-69, however, increased approximately to 50 per cent in 1978-79. Trade with India
dropped resulting in shortage of Indian
currency and in 1978-79 Nepal's trade
deficit with India reached a new low of
Rs 106 crores.

Mr Knall has recommended that Nepal should import goods from India against direct payment of convertible foreign exchange. Imports from alternative sources had proved to be dearer because of the transport costs involved. Very few developing countries have the type of geopolitical constraints which Nepal faces. "The big brother" in the south had previously conceded exceptionally favourable terms of trade in its treaty with the Himalayan kingdom which are not yet made full use of; in the opinion of Mr Knall.

Bangladesh: Green revolution still away

From ZAKERIA SHIRAZI and ARSHAD MAHMUD

DACCA

THE green revolution in Bangladesh continues to remain a chimera, as distant as ever. Yet agriculture is the staple of the economy of Bangladesh and assumes a central importance in any programme aimed at making a dent in the abysmal poverty of this country (per capita income US $100). Agriculture contributes 60 per cent to GDP and supports 80 per cent people but the method of farming is still manual and archaic and yield per acre one of the lowest in the world (1,000 lb of rice per acre) even though the soil is fertile and the silt deposited by periodic floods further contributes to fertility.

Though the food gap has been significantly reduced during the last two financial years (July to June) due to good monsoon the country still has to import more than a million tonnes of food. The much heralded programme of doubling food production by 1985 has run into difficulty. The growing amount of government subsidy pumped into the agricultural sector has not only proved inadequate but has not improved

Pattern of land holding in Bangladesh—1977

Category of farmer	Size of holding (area)	Percentage of agricultural families	Percentage of agricultural land
Landless farmers	—	32.8%*	—
Marginal farmers	0.01 — 2.00	44.9%	25.1%
Subsistence farmers	2.01 — 4.00	12.7%	24.2%
Surplus farmer	0.01 — 10.00	6.9%	31.3%
Rich farmer	10.01 +	1.8%	19.3%

* In four years since the percentage of landless farmers is said to have grown sharply.

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the condition of the masses of the peasantry because of the steady growth in the number of marginal, submarginal and landless farmers. The disproportionate amount of remittances from expatriate wage-earners (taka 340 crore annually—100 taka=Rs 49) has nearly unbalanced the economy and its resultant hyperflationary pressures have raised the price of agricultural land to impossible heights, forcing more and more farmers into landlessness and outside the pale of agricultural investment. Currently 50 per cent farmers are reported to be landless. However, due to liberal food subsidy it has been possible to stabilise rice price at around taka 6 a seer (a little less than a kilo).

Land utilisation is satisfactory and there is not much fallow land left to be brought under cultivation. Indeed forest areas are constantly under squeeze due to expanding agriculture thus threatening ecological balance. The net cropped area is 20,445,000 acres and 8,534,000 acres are sown more than once thus bringing the total cropped area to 28,979,000. Only 3,600,000 acres are irrigated by various methods.

Agriculture receives about 13 per cent of the total allocation under annual development plan. In 1978-79, for instance, taka 192.6 crore (13.1 per cent) was allocated for agriculture but 40 per cent of it was spent on subsidy for fertiliser and insecticides. Even with this heavy governmental subsidy producton is not rising significantly. One reason seems to be that the government food subsidy on rationing (which benefits only the 14 per cent urban people) tends to artificially hold down the price of agricultural produce, due to which the growers lose incentive.

In the current 1981-82 financial year, the total allocation on agriculture, irrigation and rural development is 996.40 crore takas which is 33.22 per cent of the total annual development plan of taka 3,015 crore including project aid of taka 1,000 crore. The allocation over these sectors is up by 27.2 per cent over the previous year's. One of the main goals of this programme is to attain self-sufficiency in food and to double food production by 1985. This year a target of 1,62,30,000 tonnes food production has been set up from last year's target of 1,48,00,000 tonnes. The other principal agricultural targets are: jute 63,80,000 bales, cotton 45,000 bales, sugarcane 60,45,000 tonnes and tea 9 crore pound.

To raise the yield of food and other agricultural commodities a target of distribution 12 lakh tonnes of chemical fertilisers has been set. The plan provides for distributing two crore saplings as a part of reforestation campaign. (At present a mere 9,283 sq miles are under forest *i.e.* 16 per cent of the total land area). Another objective of this programme is to yield 9.10 lakh tonnes fisheries through government and non-government efforts.

According to the programme the yearwise target food production up to 1985 would be: 1982—1,62,00,000 tonnes, 1983—1,73,00,000 tonnes, 1984—1,86,00,000 tonnes and 1985—2,00,00,000 tonnes.

Apart from the arrangement of financing and ensuring proper distribution of in-puts and other facilities 72 lakh acres of land are to be brought under irrigation from the present irrigated land of 36 lakh acres to achieve the goal. At the same time, 20 lakh acres of *aman* land are to be protected from the curse of floods and waterlogged areas are to be drained. Besides, experts believe that the use of high yielding variety (HYV) seeds has to be increased ninefold bringing it to 58,000 tonnes, the use of fertiliser in paddy cultivation must be augmented from the present 8,40,000 tonnes to 20 lakh in five years. Effective marketing and storage facility, enhancement of the carrying capacity and above all securing incentive price for the farmers are also important for the implementation of the programme. This is a tall order and there is some pessimism about the realisation of plan objective. As one agriculture ministry source put it, it is a pious wish proverbially unrealisable—at least within the time-frame.

Contribution to gdp by agriculture and other sectors

Sector	1975-76	1976-77	1977-78
Agriculture	.. 58.78%	56.98%	56.78%
Industry	.. 11.69%	11.98%	13.49%
Service	.. 29.53%	30.05%	29.74%

Sectorwise allocation in the Annual Development Plan of 1978-79

(Crore taka and percentage)

Sector	Total	Percentage
Agriculture	192.6	13.1
Rural development and village institutions ..	67.4	4.6
Flood control and water resource	146.9	10
Industry	253.3	17.2
Power and natural resource..	209.5	14.3
Transport and communication	261.8	17.8
Housing and Infra-structure	113.8	7.7
Education	77.5	5.3
Health	54.2	3.7
Pop. control and family planning	44.1	3
Social Welfare, Public admin. and others	49.3	3.4
Total ..	1,470.5	100

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Sri Lanka : In search of communal harmony

From DALTON DE SILVA

COLOMBO

A RENEWED effort is being made in Sri Lanka to end racial tension, restore peace and harmony and find a peaceful solution to the grievances of the minority Tamils in the country.

The attempt being made by the leaders of the ruling United National Party (*UNP*) and the Tamil United Liberation Front (*TULF*) comes in the wake of last month's communal violence during which hooligans went on a rampage unleashing a wave of killings, arson, looting and rape. Several thousand people of Indian origin working in some of the tea and rubber plantations and some Indian businessmen were among the victims of the attacks aimed mainly at Sri Lanka Tamils.

Following a dialogue launched by President J. R. Jayewardene, the leaders of the *UNP* and the *TULF* agreed to set up a high level committee to find a solution to the minority problem which has erupted in communal violence on several occasions since 1956.

The committee under the chairmanship of President Jayewardene includes the Prime Minister, Mr Ranssinghe Premadasa, and ten Ministers of the *UNP* Government while the *TULF* is represented by its leader Appapillai Amirthalingam and two other members of Parliament. Two constitutional experts, are also on the committee.

The two sides have agreed that the committee will discuss all questions in dispute with a view to finding a peaceful solution. It will also try to persuade all political parties to co-operate and contribute to end all forms of violence throughout the country. In addition to taking other measures, the committee will also make efforts to ensure the proper and satisfactory working of district development councils.

The district development councils, established for the first time in June in each of the 24 districts in the country, are expected to satisfy some of the grievances of the minority Tamils by providing them a measure of autonomy in conducting the affairs in the districts in the north where they predominate.

The *TULF* is conducting a campaign in Sri Lanka and abroad for a separate state for the Tamils who comprise 11.4 per cent of the near 15 million population of the country. The *TULF* began its agitation for a separate "State of Tamil Eelam" in 1976 after governments since independence rejected its call for the establishment of an autonomous Tamil State within the framework of a federal republic of Sri Lanka.

Pressing their demand for a separate state, the *TULF* says that successive governments dominated by the majority Sinhalese have discriminated against the Tamils with regard to their language, religion, culture, education and employment.

The *TULF* also claims that it received a mandate from the Tamils at the last general elections in 1977 to work for a separate state when it won 17 seats in the Northern and Eastern Provinces and surprisingly emerged as the largest party in the opposition in the 168-member Parliament.

Successive governments dominated by the majority Sinhalese have vowed not to allow the country to be divided into two separate states. While rejecting the demand for a separate state efforts have been made in the past too to find a solution to the thorny problem. In fact, two agreements were signed. One was in 1957 between the late leader of the Tamils Mr S. J. V. Chelvanayakam and the then Prime Minister, Mr S. W. R. D. Bandaranaike, who was leader of the Sri Lanka Freedom Party. Another agreement was signed in 1965 between Mr Chelvanayakam and the then Prime Minister, Mr Dudley Senanayake, of the United National Party. Both these agreements could not be implemented due to political pressure from influential extremist groups.

Now everyone is watching anxiously the outcome of the latest moves being made by President Jayewardene to fin a lasting solution. He has an advantag over his predecessors in that his regim has already conceded some concessions t the Tamils in the Constitution that wa drawn up by his Government and adopted in 1978.

Government spokesmen point ou that the Tamil language was recognise as a national language along with Sinhala which continues to remain the official language of the country. It also provides that the language of the courts i the Northern and Eastern Provinces where most of the Tamils live, will b Tamil and records and proceedings wil be in the Tamil language. Fundamenta rights have also been inscribed in th Constitution.

The proper working of the distric development councils which will provide some measure of autonomy in distric administration is expected to be a key factor in the solution that is now being worked out by the high level committee. The two sides are also expected to agree not to make any moves or utterances that will rouse communal feelings.

Observers believe that inflammatory speeches and propaganda on both sides heightened communal tension which sparked the recent wave of violence. President Jayewardene himself chided members of his party recently accusing them of having spoken in Parliament and outside words that encouraged the violence.

The terrorist activities of a group of Tamil youth calling themselves "Liberation Tigers" have also contributed to the tension between the two communities. The "Liberation Tigers" movement proscribed two years ago, supports the *TULF's* demand for a separate state. The *TULF*, however, says that it has no connection with this movement. The terrorist group operating in the Jaffna peninsula in the north has been held responsible for a series of bank holdups, highway robberies and the killing of 21 policemen during the past four years.

The latest wave of violence was sparked off by an incident among school boys at a school in Amparai in the Eastern Province in early August. The violence soon spread to other areas in the Province. Hardly had the incidents abated there when disturbances were reported from towns north of Colombo. The worst affected was Negombo, 25 miles north of the capital where several Tamil shops were burnt and looted. The situation was brought under control with the assistance of airforce personnel called out from a nearby airforce station.

Violence then broke out in Ratnapura, the city of gems, in the central highlands. Here a gang of hooligans set fire to shops and looted them.

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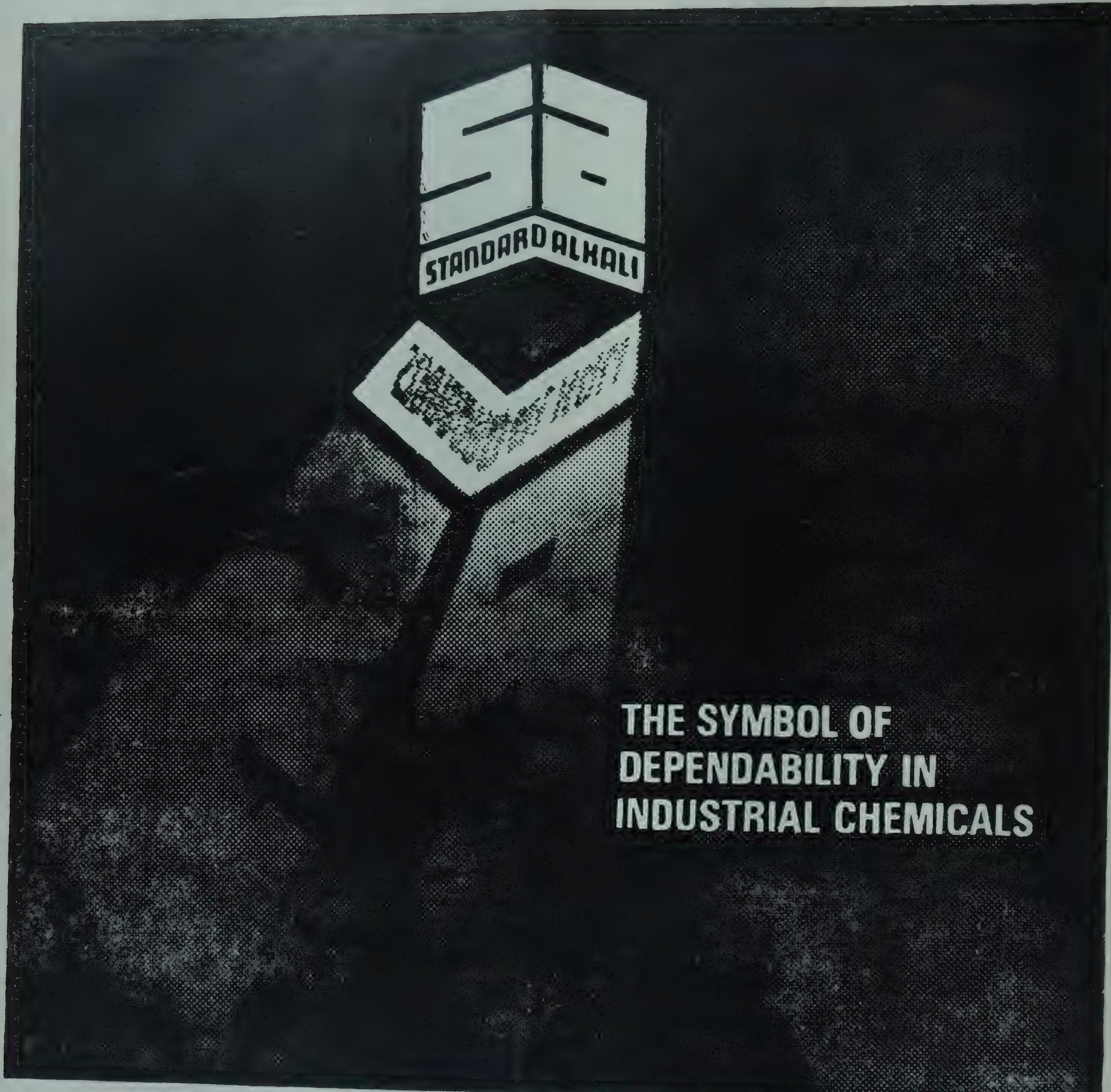
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A gang of about 300 thugs also went in buses and attacked workers of Indian origin in the tea and rubber plantations in the Ratnapura and Balangoda regions. About 5,000 workers of Indian origin in the estates were affected. The damage caused to buildings, including the "lines" in which the labourers live, to vehicles and furniture in the estates was officially estimated at rupees 2.3 million. In addition to this considerable loss in production of tea and rubber was also incurred due to stoppage of work as the labourers had fled from the estates. The loss in tea production was estimated at one million kilograms.

A person from Madras who was in a party of pilgrims was killed in an isolated incident at Tissamaharama 100 miles south of Colombo. Sri Lanka's Foreign Minister, Mr Shahul Hameed, telephoned the Indian External Affairs Minister, Mr Narasimha Rao, and the Chief Minister of Tamil Nadu, Mr M. G. Ramachandran, and expressed the Government's regrets.

The violence was brought under control after President Jayewardene declared a state of emergency throughout the country on August 17, called out the troops to assist the police and promulgated emergency laws imposing severe punishment on lawbreakers including the death penalty for arson and looting.

30 millon acres of surplus land

From ARVIND BHANDARI

New Delhi

THE disgustingly slow progress in regard to implementation of the land-to-the-tiller policy provides a glaring example of the wide gap between precept and practice in this country. In the last three decades since independence only one-third of the five million acres of surplus land has been distributed to the landless labourers, according to the statistics of state governments. But, to make matters worse, now comes the revelation that these statistics are unreliable. The National Sample Survey estimates that the surplus land in India is 30 million acres and not five million acres.

A further problem is that those among the under privileged who are allotted land often become dispossessed. Take the case of Haryana. The Chief Minister, Mr Bhajan Lal, recently admitted that certain influential people had tried to dispossess the allottees of surplus land in the State. Haryana has been trying to take the lead in the country in the allotment of surplus land to the landless, and the Government is anxious that further "overt and covert" grabbing of panchayati land should be checked in the public interest. The Chief Minister has instructed officials to take strict action against guilty landowners. Outright purchase of holdings from petty allottees who do not find farming remunerative, and pressure tactics to compel the small and marginal farmers to part with their lands, are familiar phenomena.

The surprise is that, despite all the plus land and of granting full protection to petty peasants in the unequal battle they wage against medium and large landowners, the grabbing operations have continued. The Chief Minister has admitted that this is a poor reflection on the State administration.

Admission of such transfers is not enough. Officials and others who have colluded in these deals need to be adequately punished. Although the Chief Minister has asked revenue officials to be alert, considerable damage has already been done. Speedy action is called for to cancel illegal transfers and restore the land to the original allottees; otherwise the aim of distributing surplus land to the landless will be defeated. It is also uncertain how much of the 1.30 lakh acres recently allotted to the weaker sections of society has remained with deserving people.

Irregularities are suspected in respect of urban land also. For instance, the State Government's decision to allow private colonisers to develop land for residential purposes around Delhi had led to much criticism because of the avenues for profiteering and other malpractices which the plan opens up. There is already talk of a "multicrore land racket" in the region. Land values around Gurgaon have risen by about 300 per cent in the past three months. Another report indicates that political considerations have weighed with the authorities in the acquisition of land near Hissar. Certain ministers are stated to be on a plot-grabbing spree in Haryana urban estates.

Slow progress in regard to acquisition and distribution of surplus land is often attributed to litigious hurdles. This may to a certain extent be true but cannot serve as a fig-leaf of lack of political will and administrative lethargy. What is happening in Haryana roughly mirrors the situation in the country as a whole.

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tions. Given the current high rate of use of Fund resources it is anticipated that the Fund will need to undertake supplementary borrowings of the order of SDR 6-7 billion a year over the next two or three years. In the first half of 1981, the Fund has concluded borrowing arrangements with the Saudi Arabian Monetary Agency, under which the Fund will be able to borrow up to SDR 4 billion in each of the next two years, with the possibility of additional amounts in the third year. In addition, the Fund has made arrangements for short-term financing of about SDR 1.3 billion from central banks of 16 industrial countries. About one half of this amount is available under a borrowing agreement with the Bank for International Settlements and the remainder under direct bilateral arrangements with the 16 central banks. These resources will contribute to financing of country programmes under the Fund's policy of giving members enlarged access to its resources. While the Fund is exploring further bilateral borrowing arrangements with members and central banks of members, it may also have recourse to the private capital markets, if indispensable to finance continued expansion of its operations.

China: Changing banking scene

Concluded from page 494

China's sole foreign exchange bank, seemed to have slowed down its hectic pace of activities this year. The only new branch scheduled for opening in 1981 was New York which will be an addition to 77 branches in China and a network in Hongkong, London, Luxembourg, Singapore and Tokyo.

In December 1980, BOC's articles of association were amended clearly defining the bank's role and its ownership, with a view to meeting some of the objections raised by international law firms advising western banks over loan risks. After the revision BOC became a state-owned bank as a few of the privately-held shares were bought up from the overseas Chinese. W[illegible]being state-owned it remains a distinct entity from the state, thus not making international loans to BOC a sovereign risk.

BOC's legal status to borrow money from foreign sources is specifically described in the new articles and its scope of activities has been widened and more clearly defined.

BOC and other Chinese financial interests had since 1979 formed joint venture merchant banks with United States and Japanese interests. These were set up with the intention of channelling funds to joint venture projects or foreign investments mainly in China. While keeping an eye on luring investors to China, these banks have branched out into other money making activities. For instance CCIC Finance, a joint venture between Bank of China, First National Bank of Chicago, Industrial Bank of Japan, and China Resources, has diversified into foreign exchange dealing, Hongkong and regional loan syndication and consultancy services earning hefty fees.

On the other hand, Kincheng-Tokyo Finance, a joint venture merchant bank — the partners being Bank of Tokyo, Bank of China and Kincheng Bank, which has strong Shanghai connections — stuck largely to regional loan syndications with a loan portfolio of HK $ 300 million in the six months to March 1981. Although both these merchant banks were formed specially in view of their American and Japanese partners, to lure investment into industrial and commercial ventures in China, they have been given a go ahead to pursue interests unrelated to the Chinese economy.

While China's banking activities abroad were diversified and expanded with sure signs of more to come domestically the banking structure came under tighter controls during 1980-81. This was because of heavy budget deficits suffered in 1979 and 1980. These deficits were largely caused by uncontrolled capital investments and larger money in circulation due to wage rises to workers and better prices for farmers for their output.

Therefore, early this year new instructions were issued by the Ministry of Finance and the PBOC to tighten loan conditions. Any enterprise which could possibly be earmarked for closure owing to the policies of retrenchment was not eligible for loans and the bankers were instructed to strictly police all loans to ensure that working capital was not switched to capital construction by individual enterprises.

Since 1979 many individual trade and industrial corporations were allowed to keep a part of their export earnings instead of turning them over to the state. Many of these firms had kept accounts in foreign banks. In early 1981, all such firms were directed to bring back all foreign monies to Bank of China branches, so that authorities could keep an eye on the flow of foreign exchange.

In addition to such belt tightening, the central Chinese leadership issued in early 1981 treasury bonds worth 5 billion yuan (US $3.3 billion) to make up part of the 1980 budget deficit. All collective and state-owned enterprises, as well as individuals were encouraged to subscribe to these bonds. In the early 1950s, Peking had issued state bonds, but only wealthy individuals—former capitalists—were required to subscribe to those, which were paid back in 1958. (The 1979 budget deficit of 17 billion yuan—US$11.3 billion—was covered by merely printing more currency.)

Despite domestic bonds and other austerity measures, China resorted to a loan of US$550 million (equivalent of 450 million SDRs) from the IMF in 1981 to meet its balance-of-payment deficit. The World Bank chipped in another US$200 million to support higher education in China, with the money going mainly for such hardware as computers and scientific equipment.

Also in the business of raising bonds were Fujian and Guangdong provinces, which have strong connections with overseas Chinese in Southeast Asia and North America. These bonds range from 500 yuan to 50,000 yuan, with maturities of eight to 12 years and interest rates of six to eight per cent. The bonds being tax free, Chinese citizens could subscribe to those with foreign currencies arranged by their relatives abroad.

In raising money from capital markets abroad, this year China also initiated plans to issue yen-denominated bonds in Japan. China International Trust and Investment Corporation (*CITIC*) made plans to issue between 10 billion (US$48 million) and 15 billion (US$72 million) yen debentures. *CITIC* is China's official arm to lure foreign investment into the country. The Japanese issue was being prepared by Nomura Securities, Daiwa Securities, and Bank of Tokyo. The money raised through the yen bond issue is to be used mainly to develop China's coal and non-ferrous metal resources.

However, the major source of capital in foreign currency will have to come from foreign governments and related agencies and from international commercial banks. In their flurry to woo the newly emerging market of one billion people western governments and Japan offered direct credits, some arranged loans from their Exim banks, and large commercial banks followed suit. By 1980 over US$26.2 billion worth of credits were committed to China by OECD governments and western and Japanese private banks. However, China's draw down amounted to barely 10 per cent of the total offered. The problem was, as the Chinese have learned through hard knocks, large scale input of technology needs a lot of infrastructure, skilled man-power and the progress of other sectors of economy in tandem with the sectors in which new technology is poured in.

Even without additional external input, the Chinese economy was becoming overheated. While a lot of money was being wasted on unplanned, uneconomic, low-priority ventures, the country could not find the domestic resources even to improve rapidly transport bottlenecks. The over US$2.5 billion worth of projects—mainly Japanese, US and West German—which were cancelled in 1980, were to a large extent due to the Chinese not being able to put up RMB capital and the necessary infrastructure for these large scale plants. Instead, the Chinese leaders have been trying to interest the foreign sellers of these plants to enter into joint ventures to pursue these projects.

Thus China is taking the slower road to modernisation—a policy called readjustment and retrenchment—in

Extension of crop insurance

By **ARVIND BHANDARI**

CONSIDERING the hardship faced by farmers on account of loss of crop, the Government's decision to extend the crop insurance scheme to cover about five lakh hectares spread in 100 districts during the Sixth Plan period is well-conceived. The areas to be covered by the scheme will be selected by the General Insurance Corporation (GIC) in consultation with the Ministry of Agriculture and Co-operation and the state governments concerned. The pilot crop insurance scheme was introduced in the country in 1979 in three states — Tamil Nadu, Gujarat and West Bengal. It covered 13,181 hectares, involving 16,268 farmers. The total sum insured was Rs 1.30 crores and Rs 5 lakhs was collected as premium. During 1980-81, the scheme was extended to Maharashtra. The area covered by the scheme was increased to 18,703 hectares, involving 23,442 farmers. The total sum insured was increased to Rs 1.65 crores and Rs 6.9 lakhs was realised as premium. Nine more states—Haryana, Himachal Pradesh, Andhra Pradesh, Kerala, Karnataka, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh — have also decided to implement the crop insurance scheme. Under this scheme, which is voluntary, the GIC and the state governments are co-insurers : the state governments' liability being 25 per cent of the premium and indemnity. The GIC has earmarked Rs 6.50 crores for this scheme. Out of this Rs 4.87 crores is the GIC's share and Rs 1.63 crores that of the state governments. The Ministry of Agriculture will provide assistance to the tune of Rs 20 crores to the GIC for setting up a crop insurance fund to enable it to meet the expenditure on the extension of the scheme. The state governments have also been requested to earmark funds for the scheme.

Helping tribals

A quick tour of the eastern region, which took me through parts of West Bengal, Bihar, Orissa and Madhya Pradesh, has left a few impressions which seem to be worth sharing. One, Calcutta's man-pulled rickshaws are an abounding disgrace, bearing an eloquent testimony to the continuing apathy and insensitivity of man to the degradation of fellow man. It does not subscribe to the Marxist credentials of the West Bengal Government that by turning a blind eye to the this eyesore on Calcutta's streets it should collude in such exploitation of the worker class. Some perfunctory queries gave the impression that the authorities are ignoring this malaise because the rickshaw-pullers, mostly Biharis, constitute a small vote-bank for CPM. Politics on the ground invariably exacts a toll from idealism. Two, now I know what people mean by the disparaging remark that no government exists in Bihar. Dhanbad is the nearest railhead for Bokaro, which is about 30 kilometres away. In order to reach Bokaro you have to cross a longish bridge over river Damodar. Quite some time ago this bridge was declared "unsafe". But construction of an alternative bridge a little upstream, undertaken by the Hindustan Steelworks Construction Limited under the supervision of the State Government, has been inordinately delayed. In the meanwhile, to prevent a disaster, the authorities have sought to "strengthen" the bridge by paving the surface of the road strip on it with wooden beams. This has made the road strip so uneven that frequently heavily loaded trucks break down midway on the bridge, with the result that not only a vital line of communication is disrupted but also that dozens of vehicles are left stranded precariously over a bridge which might collapse any time. I learn on good authority that the State Government, despite the urgency of the situation, is going about in its usual slothful, sluggish ways. Perhaps Jagannath Mishra is waiting for a Baghmati to occur at Damodar. Three, Rourkela provides an example of the gratifying results that can be achieved if an organisation makes even nominal efforts to bring the surrounding tribal population a bit nearer civilisation. A small-built, ebony-skinned people, mostly Hindus but having a sprinkling of Christians, the tribals are being helped by the steel plant authorities to help themselves. Apart from being rendered some direct assistance, the tribals are taught how to secure bank loans to start vocations. I visited three villages to see this peripheral development programme. Nuadara is populated by Santhals and Mundas. The spick and span huts made by them with just straw and mud are truly amazing. Pottery seems to be the popular vocation, but some tribals go to the plant to work as contract labour. The authorities have provided a school building. The tribals of Jobaghat are being encouraged to make paper pulp. A co-operative society assists them in the supply of raw materials like waste paper and discarded clothes as well as in marketing. In Jamsera village it is poultry farming that is gaining popularity, with 16 sheds already having been set up. The plant authorities are lending support in the form of guidance to secure loans from the Bank of India, veterinary services, insurance and collection and transportation of the produce. Each poultry farmer pays Rs 50 to the bank every month as instalment repayment.

Return of native

The Chief Minister of Haryana, Mr Bhajan Lal, recently invited some journalists to Haryana Bhavan for a luncheon and, surrounded by a few officials, announced his assessment that overseas Indians were eager to set up industries in the State. He brandished a sheaf of papers which were supposed to be application forms given to him by the Indians he met in Britain, the USA and Canada. Mr Bhajan Lal's expectation is that about 250 to 300 overseas Indians will eventually come forward to invest in Haryana. For this purpose a Haryana State Infrastructural Development Corporation is to be set up, and arrangements are being made to give single-window clearance. Also, 20 per cent of the plots to be developed by the State Government for residential and industrial purposes will be reserved for overseas Indian investors. The Indian Investment Centre, whose job it is to promote foreign investment in this country, has branches in the countries on which Bhajan Lal and party descended. Complacency would, however, be unwarranted. Only a few days ago Britons of Indian origin, participating in a symposium organised by the London branch of the Indian Investment Centre, castigated the licensing and controls policies of the Government of India. The overseas Indians pointed out that because of the recession in the West machinery was available at cheap prices for being brought to India. But before that the "hurdles" must be removed. They have a point.

DATELINE NEW DELHI

BOOKS & IDEAS

Facets of innovative banking

Current Trends in Indian Banking—Volume I

By B. Ramachandra Rao

Suneja Publishing Corporation, B-4/29, Safdarjang Enclave, New Delhi 110 029; *First Published in* 1981; *Pages* 217; *Price not mentioned.*

'Current Trends in Indian Banking' is a collection of articles which were published in banking and financial journals. Each article forms a chapter of the book which consists of 35 chapters in all. The book is primarily meant for bankers and others concerned with the development of banking. A wide range of issues related to the development of banking have been discussed by the author. At the appropriate places, he has put forth valuable suggestions to tackle the various problems which crop up in banking development and administration.

The concept of development of banking which had a restricted meaning prior to nationalisation needed redefinition in the changed circumstances. Banking development was regarded as a 'synonym' for deposit mobilisation at that time. Now it is a multi-dimensional concept which aims at the development of the economy of the places served by the banks by developing "everything that is possible to develop at micro as well as macro levels". The other development related problems are discussed by the author under various chapters the most important ones being the following: the concept of development in banking, some thoughts on business development of bank branches, the role of manpower in banking development, and banks and small scale industries.

In recent years, the banks led by the public sector banks have introduced various special schemes to serve the society in a much better and bigger way as compared to pre-nationalisation days. The author evaluates 'lead banking', 'district credit plans', 'differential interest rate scheme', 'small loans against DICGC (Deposit Insurance and Credit Guarantee Corporation) cover,' 'credit authorisation scheme', 'participation certificates' and 'rural banking' which are the important schemes introduced by the banks to achieve the above-mentioned objectives.

The author has also chosen to deal with the usual problems faced by all bankers such as those related to deposit mobilisation, recycling of resources, bank loan and write-offs, over-time payments in banks, changing of banks by the customers and branch level profitability. He emphasises the roles of staff involvement and deposit oriented advances as the two keys for a pragmatic approach to mobilise deposits. From the points of view of resources constraints as well as profitability, faster recycling of resources is significant to banks. With increasing levels of participation by banks in the developmental activities through lending under the various special schemes, recovery problems have assumed larger dimensions.

The author has made many suggestions including the restructuring of the pattern of credit, review of the portfolio of the banks' investments and formulation of dependable procedures for projecting and monitoring credit flows to tackle the problems of overdues and recoveries. He has taken exception to the undue publicity being given to overtime payments in banks. It is pointed out that it is difficult to precisely measure the load of service-related work done perceptibly and tangibly in a service industry like banking in contrast with that in production oriented industries where the additional output produced out of overtime payment can be identified.

Everything is said to be time-bound in banking. Things should be up-to-date on day-to-day basis and *ad-hoc* figures and statements called for should reach the head offices promptly which result in overtime work in the branches. Nevertheless, the author has listed certain restrictive practices by the employees which are responsible for overtime work and also made useful suggestions to tackle the problem of overtime payments.

It is reiterated in the book that unless there is a proper reason, customers do not change banks. The provision of personalised service is emphasised to prevent the changing of banks due to dislike between banks and customers. After the nationalisation of banks an impression is gaining ground that each branch does not need to bother about making profits. Howev the author categorically states oth wise. According to him it is necess that branches earning profits sho continue to do so and branches in red should be brought on the pr side by deliberate efforts by the hig authorities.

Valuable efforts have been ma in the book to throw light on some the innovative fields in banking su as lease financing and factoring. Le ing is a very important and attracti branch of term finance. There are t dimensions to lease financing—where person gets plant and equipment use on rental basis for his enterpri without purchasing them himself a where a person wants to buy pla and machinery for hiring to othe against regular rents. Banks may able to make a big dent in industri financing through lease financing areas such as fishing, road transpo shipping etc. Another area quite ne to Indian banking is factoring which primarily concerned with the collecti and financing of receivables/book deb on behalf of manufacturers or selle of goods and services. Those ban which are already engaged in financin of hire purchase and instalment sellin business or lease financing may find easier to develop factoring.

The book also deals with moder tools of analysis such as performanc budgeting in banks and cash plannin by borrowers. The underlying idea to project the business in advance fo every branch and then to work to reac the target set before the date set fo it in each year. Each branch is aske to submit its performance budget fo the next year in relation to its perform ance in the past and based on the poten tiality in the command area of th branch. The regional office in consul tation and co-ordination with the branc itself and in the light of the macro level target fixed by the head office fo the region finalises it. According to th author, performance budgeting is bein taken as a ritual by the bankers an the spirit behind it is not properl understood and translated into action Similarly, cash planning, an importan financial management tool, has not ye received its due acceptance among th borrowing companies, laments th author.

One of the drawbacks of the boo is mentioned by the author himself i the preface to the book. The article which were published from time t time were not updated when convert as chapters purportedly "to retain th historical value". Another drawback i that as each article was written indepen dently of each other, repetitions ar

undant. It is hoped that while
nging out volumes in respect of his
ure articles, these aspects will be
en due attention. On the whole,
book is a valuable addition to the
rature on principles and practice of
king.

Kumaran Pola

nd nutrients

rtiliser Industry Handbook 1980,
hemical Age of India Vol. 31 No. 12,
cember 1980)

itor J. P. de Sousa (Sr)

chnical Press Publications, Eucharis-
Congress Building No. 1, 5/1 Con-
t Street, Bombay 400 039; *Price*
95.

World agricultural production has
n steadily increasing for many years
v with the exception of 1972 when
duction did not rise. The major
t of agricultural production is ac-
nted for by cereals which supply 52
cent of the protein requirement of
world's population and 65 per cent
the world's edible dry matter. The
ld production of wheat, rice and
ze, which together supply half the
l food, has more than doubled in a
od of less than three decades—pro-
tion of rice by 154 per cent, wheat
144 per cent and maize by 171 per
. The per capita food production
during the seventies in the deve-
d countries; it also rose in Asia and
th America but fell in the African
ntries. The total grain deficit of
developing countries has been
ening over the years and is expected
each 50 million tonnes in the next
or five years. Considered against
foodgrains production of 730
ion tonnes of the developing coun-
the shortfall of 50 million tonnes
not appear to be significant, but
fact is that the present level of con-
ption in the developing countries
es a very large number of people
ernourished and that means that to
the real needs of the population in
developing countries the production
odgrains needs to be increased by
much more than 50 million tonnes.

An analysis of the factors promot-
production of foodgrains shows that
about a quarter of the increase in
uction was contributed by an in-
e in the acreage under cultivation,
e as much as three-fourths of the
ase was made possible through an
sification of production—an in-
ed crop yield per hectare. It has
estimated that on an average one
tivated land in a developing country produced 10 kg grain. With high yielding varieties of seeds the yield can be still higher. Data for crops other than cereals are not available, though. Nevertheless, the role of fertiliser in increasing food supplies of the developing countries comes out very clearly from these figures.

The issue consists of articles, previouly published and freshly written, on the fertiliser industry and technology. The bulk of the contribution is made up of the papers submitted to the seminar organised by the Fertiliser Association of India (FAI) which are also available in a handy form in a publication brought out by the FAI itself.

Some of the contributions supplied by the foreign authors are not easily available in India. They deal with fertiliser production processes and the position of developing countries in fertiliser availability and use.

Inasmuch as all the writers are knowledgeable in their subjects this collection of articles on fertilisers is a dependable source of reference.

Subhash Chandra Sarker

Unto the last

IN an article in *Ceres*, published by the Food and Agriculture Organisation, Mr Pran Chopra, an Indian journalist, discusses how the *Antyodaya* movement has succeeded in bringing benefits of state policy directly to the poorest of the poor in Rajasthan.

Mr Chopra writes: "There were problems to begin with, not the least being well-based skepticism about politicians' interest in the welfare of the poorest. Haste added some, as with insufficient preparation the Government insisted on launching the programme on Mahatma Gandhi's birthday, October 2, in 1977. Some undeserving families were selected, some given loans without proper testing, the target of five families per village proved to be unrealistic and had to be changed to between three and seven, depending upon the size of the village. But extensive random sampling in different types of villages as well as cross-checking of aggregate information convinces me that *antyodaya*, as operated in Rajasthan, which is an area as large as many countries are and has a population of nearly 26 million, has passed a number of very important tests.

"The first test is the spread of the programme. It has penetrated the remotest tribal villages I visited, and I accept as valid the Government's claim, also corroborated by other evidence, that on an average five families were annually selected in each of the 33,000 villages in 1978 and 1979—except where none were found to be below the poverty line—and, perhaps with some time lag, were also given due assistance.

"The second test concerns the earnings of those assisted. Not only some means of livelihood have been given to those who had none, but the earnings of most of the people I met have risen well above the poverty line and are not far from the *per caput* income in India. By that, I mean net earnings, after operational needs have been met and loan instalments repaid with interest. Apart from the scattered human examples, there is the telling aggregate evidence provided by local bank managers that the borrowers—poor, ignorant and new to money though they be—have a high 80 per cent record of repayment, which apart from certifying their good conduct as borrowers proves satisfactory profit-making.

"The third test has to do with the social quality of the operation. Apart from spreading knowledge about modern money management and such newfangled institutions as livestock insurance, it is making religion and caste barriers more flexible. In many villages, very low-caste families are proportionately more numerous among the *antyodaya* beneficiaries than in the village, which shows that compassion rather than caste interests determined the choice of families when the village met. The only Hindu in a village was among the beneficiaries chosen by Muslims, and examples of this kind are numerous.

"Nevertheless, I have two doubts regarding *antyodaya's* future. One relates to the perversity of politics. When a new party comes to power it sometimes scuttles programmes, however, popular and beneficial, which were feathers in the cap of the outgoing party, not realising that the credibility of the political process as a whole might be thus imperilled. This can happen to *antyodaya* also.

"My second doubt relates to the existing state of social dynamics. The most powerful classes in India's mass politics today, whether urban or rural, are neither the very rich nor the very poor but the middle and lower middle classes. But, while the very rich have only to suit their ends, the poor have only their numbers, and their numbers are not sufficiently organised as yet on their own behalf, especially in rural politics."

Problems of shipping

By P. C. MAHANTI

EASTERN INDIA TODAY

AT the annual meeting of the Foreign Trade Association (Eastern India) the subject of shipping difficulties that this region has been facing was highlighted. The chairman, Mr S. N. Kukreja, focussed on the fact that freight to most destinations in the world from the east coast of India is higher than that from the west coast and being much higher than what the competitors have to pay imposed an additional disability on exporters here. The shipping facilities are equally tardy with frequent changes in shipping schedules, delays in the docks besides protracted transit times. Although containerisation is developing in the region in a satisfactory way there is no perceptible freight advantage. Calcutta port's working has noticeably improved during the last eight or nine months but the infrastructure for the Calcutta-Haldia port complex has not developed adequately yet. Incidentally the Russians are again taking a keen interest in the development of a full-fledged and regular container service from Haldia. A Soviet line, the Black Sea Steamship Company, introduced a service from Haldia last year but withdrew only after four months of operations. Instead it has been running a regular service from Calcutta now.

The only company which runs a fullfledged container service from Haldia is CGM, a French shipping line. The Shipping Corporation of India service to Australia and New Zealand is not fully containerised but it has plans to introduce a service to African ports in the near future. If the Russians come back again, as they are reportedly planning to do—a Soviet delegation is coming to Calcutta soon to examine the possibilities and prospects—then Haldia's container facilities will be fully utilised and there will be a healthy increase in the port's traffic.

Incidentally Calcutta port has been doing steadily well in the container traffic that now operates from here. During August the port authorities claim a record 2,517 containers were handled as against only 539 in the same month of last year. The Port Trust authorities also claim that labour productivity in this particular field has improved to an unrecognisable degree. As many as 65 containers were stuffed and destuffed in a day during last August compared with only 20 to 25 in earlier months. If the infrastructure, including roads and entrances, improves further productivity is likely to spurt even more dramatically.

LIC's investments

Eastern India may have some justification in complaining that public financial institutions, by and large, have not done justice to its needs but that complaint would not apply to the Life Insurance Corporation—if the figures released by the corporation on its investment in the region are correct. The LIC's investments in the country during the past 25 years of its life is Rs 3,823 crores out of which it has invested Rs 675 crores in the eastern region. Percentagewise the ratio to the total is 20.6 and that is quite good.

Of Rs 675 crores as much as Rs 202.94 crores has been given as loans to the state electricity boards. The highest amount of Rs 80.75 crores has been given to the West Bengal State Electricity Board. The Bihar board gets Rs 51.83 crores, and those of Orissa and Assam Rs 47.40 crores and Rs 14.30 crores respectively.

The corporation has also invested as much as Rs 84.67 crores in housing. The various state housing boards have benefited from these loans, West Bengal again being the biggest beneficiary. The State received Rs 30.19 crores followed by Orissa with Rs 26.63 crores and Bihar with Rs 19.91 crores. Assam comes last in the list with Rs 4.61 crores. Industries and co-operative societies have received Rs 37 crores. Drinking water schemes in urban areas received Rs 6.66 crores and State transport corporations Rs 3.5 crores.

Cement project

In the course of a recent visit to Orissa it was interesting to learn that Arab investors are eyeing a ceme project in the State. Negotiations a going on as to financing and producti sharing etc but if its goes through will probably be the largest unit eastern India with an eventual capaci of two million tonnes of portla cement. The State Government auth rities through the industrial developme corporation have applied for a letter intent as well as the lease for lim stone mines in the area which has be chosen as the location for the plant. Finnish company and an Austrian o have shown interest in making fer chrome and press reports have it th the project has been finalised. T State's abundant raw material resou ces remain largely unexploited. It one of the merits of the industrialis tion drive launched by the prese ministry that investor interest fr within the country and abroad is bei increasingly attracted to Orissa. T Finnish and Austrian companies in th case are Outokumpu of Finland a Voestalpine of Austria both mining a steel interests.

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A SURVEY ON STEEL INDUSTRY

A view of the Bokaro Steel Plant

Infrastructure for steel

By ARVIND BHANDARI

IF per capita consumption of steel were to be the criterion of development, India would have the dubious distinction of occupying one of the lowest rungs of the economic ladder. This country's per capita steel consumption at about 14 kilograms compares miserably with that of Japan at over 75 kilograms.

In spite of the present aberration in the form of glut of certain items, which would be explained later, the demand for saleable steel, in a general sense, remains ahead of supply. For the current year the demand is estimated at 10.5 million tonnes whereas the targeted production of the integrated steel plants (including TISCO) is 7.3 million tonnes plus another 2.50 million tonnes from mini-steel plants. At the end of the Sixth Plan (1984-85) and Seventh Plan (1989-90) the demand is estimated at 12.7 million tonnes and 18.4 million tonnes, respectively. On the other hand, the steel ingot production capacity of the integrated steel plants, including TISCO, is projected to be expanded from 11.4 million tonnes to 14.6 million tonnes by the end of the Sixth Plan and 20 million tonnes by the end of the Seventh Plan. Since yield of saleable steel is generally 70 to 75 per cent of the ingot production, it would mean that even at the end of the Seventh Plan supply of saleable steel will lag behind the demand. A working group of the Planning Commission estimates that between 1984-85 and 1989-90 steel imports would have to be made ranging between 1.6 to three million tonnes.

Considering the steel industry's close dependence on the availability of power, coal and railway transport, it is necessary to emphasise that mere expansion in capacity would be meaningless without matching increases in infrastructural support. For example, between now and 1989-90 the requirement of coking coal will go up from 17 million tonnes at present to 34.5 million tonnes and that of non-coking coal from 3.3 to 6.6 million tonnes. Requirement of inward railway freight movement of raw materials will go up from 45.9 million tonnes to 96.3 million tonnes. Outward railway freight movement of saleable steel and by-products will go up from 10 to 23.5 million tonnes.

Steel production capacity is to be expanded through expansion and modernisation of the existing steel plants as well as establishment of new plants. Work on modernisation and expansions is behind schedule. This will be taken up in some details subsequently in this article. Progress regarding establishment of new plants is also behind schedule, the magnitude of delay being different for different projects. Major units of the Salem steel plant, which would be a sister unit of the Durgapur alloy steel plant, recently had a trial run. The Salem project is due for commissioning in mid-September. As regards the Vishakhapatnam project, land has been acquired and site levelling and excavation work are in progress. The first stage of the project will be completed in 48 months from now or by mid-1985. The Vishakhapatnam plant will produce 1.5 million tonnes at the first stage and 3.5 million tonnes at the second stage, which is to be completed during the Seventh Plan. The total cost of the project is estimated at Rs 3.000 crores. The Vijaynagar steel project has been cleared by the SAIL board following submission

THE GOOD
EARTH

AND INDEED ROURKELA HELPS GOOD THINGS GROW ON IT

The earth. Green and gold. Nurtured by rain, sunshine and human beings. Bountiful. Treasure-house of unplumbed wealth. From the fish in the waters to the lofty tree-tops. From the metals underground to the rich loam of the crust.

Many good things grow on this good earth of ours. Primary among them being food. Sustenance of man.

To-day, man aided by scientific advancements has put technology to work. Helping good things grow better.

Take farming for example. Bountiful harvests have become routine. Food production has increased ushering in green revolution to meet the increasing demand of a growing population.

Increased mechanization, better fertilizers, pesticides, modern farming equipment like tractors and power tillers, food-processing plants. packaging for year-round availability, transportation-tracts, railways, ships, automobiles to reach food to the people.

All these have developed and matured under the wings of modern steel production. Steel to make machines, machines to farm, process transport. Machines to make good things grow.

Rourkela Steel Plant, one of the most sophisticated steel producers in the country, is helping the entire agricultural scene directly through CAN fertilizer 'Sona' from its huge fertilizer complex and indirectly through various categories of steel for various agricultural implements, steel for pipes for tube wells and water transport, steel for power industry to help better irrigation and steel for trucks, trains and ships to enable quicker movement of food grains.

Rourkela helps things to grow better still on the good earth.

STEEL AUTHORITY OF INDIA LTD.
ROURKELA STEEL PLANT

RSP/PA-80/79

of a preliminary report by Metallurgical Engineering Consultants India Ltd (MECON). This project is also slated to have a capacity of three million tonnes.

The Paradip file is going the rounds in the corridors of power in New Delhi, with the British Steel Corporation and Mannesman-Demag vying for the steel project. The British public sector company is reportedly very keen to get the contract, so much so that the Thatcher Government almost regards it as a prestige issue. I learn from reliable sources that, in the view of the Indian High Commission in London, the British economic aid to India could be adversely affected if the contract were to be denied to BSC. Impartial observers point out that the BSC is at present running up huge losses and a company in such a poor financial condition can hardly foster confidence. In terms of technology also the Germans, who built the Rourkela plant, are regarded as superior. While these pros and cons are being debated the ultimate cost of the project continues to rise. One opinion, which springs more from concern for political sensitivities rather than technological considerations, is that, with the Russians already having the Vishakhapatnam contract, the tangle may be resolved by splitting the remaining two plants between the Germans and the British

Consolidation

It can, however, hardly be gainsaid that more important than creation of new capacity is consolidation of the existing capacity. Capacity utilisation in the Indian steel industry has generally been poor, largely because of the power and coal constraints. The last two years, 1979-80 and 1980-81, were particularly bad because of the infrastructural crisis triggered by the 1979 drought. Coal and power supply to the steel industry went out of gear and it was only in the second half of last year that the situation began to improve. In 1980-81 ingot steel production in the steel plants was only 5.5 million tonnes against the rated capacity of 9.4 million tonnes and saleable steel production was only 4.7 million tonnes against the rated capacity of 7.2 million tonnes.

The first four months of the current financial year, April-July, have recorded a tremendous improvement. Ingot steel production during these four months went up by 18.6 per cent compared to the corresponding period last year. Similarly saleable steel production increased by 30.7 per cent compared to the corresponding period last year. The plant-wise ingot steel production targets for this April-July period impressively fulfilled are as follows: Bhilai 98.6 per cent, Durgapur 102.9 per cent, Rourkela 81.1 per cent, Bokaro 90.5 per cent, IISCO 97 per cent. However, to put the performance in perspective, it is important to note that, owing to the pessimism induced by the difficulties encountered in the previous two years, the annual targets for the current year have been fixed at levels considerably below the installed capacity. The targets fixed and the installed capacity are as in Table A.

Table A: Capacity and targets

	Capacity	Targets
		('000 tonnes)
Bhilai	2500	2100
Durgapur	1,600	1,000
Rourkela	1,800	1,400
Bokaro	2,500	2,050
Tisco	1,000	660

Low target fixation also means that the performance of the steel plants remains considerably below full capacity utilisation. It is further worth noting that the plants which were completely in the dumps during the last two years have recorded a high percentage improvement whereas those which performed comparatively better in the last two years have recorded virtually no improvement. Whereas Bhilai's performance during the April-July period shows only a 0.8 per cent improvement compared to the corresponding period last year, Rourkela has actually come down by 2.7 per cent. On the other hand, Durgapur and Bokaro have recorded improvement to the tune of 32.3 per cent and 72.2 per cent, respectively. This is understandable. While percentage improvement from a low base is always more impressive, Bhilai and Rourkela have reached a plateau at comparatively higher performance. As for IISCO, its percentage improvement is limited because it remains sick.

Reasons for pick-up

What are the reasons for the pick-up in steel production in the last few months ? A tour of steel plants at Durgapur, Bokaro, Rourkela and Bhilai as well as discussions with their managing directors show that the main reason is the improvement in infrastructural support. There has been some improvement in the supply of power and coal to the steel plants. Another contributory factor seems to have been comparatively less trouble on the labour front during the last four months. The importance of this factor cannot be under-rated if it is recalled that the emergency year of 1976-77, when labour was kept on a tight authoritarian leash, was perhaps the best year of the Indian steel industry. It was pointed out to me, with no doubt ample justification, that the human factor should also be taken into account. It can be extremely frustrating for a worker on the shop floor to face, day-in and day-out, shortage of necessary inputs. In other words, as and when the inputs become available, a worker could be expected to be enthused to relatively greater effort.

Mr K. C. Khanna, chairman of SAIL, with whom I had a discussion after my tour of the steel plants, puts the entire issue in perspective. Says Mr Khanna : "Infrastructural support in the form of power, coal and transport is of course our basic need; but after these basic requirements are met our true test begins. It does not mean that the steel industry does not have its own internal problems and deficiencies. We have to improve our technology, productivity of labour and general efficiency".

Railway transportation

Railway transportation remains a major problem for the steel industry. There are two aspects. Raw materials have to be moved into the steel plants and the finished products have to be moved out. Raw materials are no doubt being moved by the railways but, according to the SAIL authority, the requisite rhythm of movement is lacking, with the result that there are often difficulties in regard to availability of the right input at the right time. In regard to the outward movement of freight in the form of steel products the main bone of contention seems to be jumbo-rakes. The railways appear to find it more economical to provide big jumbo-rakes to the steel plants for movement of steel. But the argument of the steel industry is that the various plants often do not need to move huge quantities in different directions and that what is required is smaller rakes.

Since the railways often fail to provide smaller rakes, the steel industry complains of "restrictive practices" of the railways. A jumbo-rake movement of steel causes distortions in distribution. Furthermore, how to move steel into the interior where the consumer is mostly located ? At present there seems to be no alternative to movement by road transport, which is very expensive. The railways naturally explain their inability to fully meet the requirement of the steel industry in terms of shortage of rolling stock, yard capacity and line capacity. The problem seems to be exacerbated to a certain extent by corruption among different ranks of the railways personnel.

I was told of dozens of instances of wagons becoming available to private parties after the SAIL authorities had elicited a negative reply from the railways. All such stories cannot be untrue. The north-eastern region, which mostly has metre gauge, presents a particularly difficult problem in regard to transportation of steel. In the short-run there is no option to the chairman of

SAIL and the chairman of the Railway Board sitting together periodically to sort things out as best as they can. From the long-term point of view, however, the railways do not seem to be geared to satisfactorily meet the requirements of the steel industry and this lacuna will have to be rectified through appropriate adjustments in investment.

Sales organisation

Up to 1961 different steel plants had their own sales outfit. In 1962 the Central Sales Organisation was formed as a wing of the then Hindustan Steel Limited. SAIL was initially a holding company but on its conversion into an operating company, in 1979 CSO became the Central Marketing Organisation, the change in nomenclature obviously being intended to widen its concept. Since distribution of steel is almost fully controlled, CMO is more a distribution organisation rather than a marketing outfit. Quotas for supply of various steel items are determined right down to the grassroot level through an unwieldy pyramidal apparatus which has at the apex the Steel Priority Committee followed by the Iron and Steel Controller. The quotas are fixed on the basis of data collected and supplied by CMO and the statistical wings of the consuming ministries.

Steel consumers are divided into four groups. Group A includes priority sector consumers like coal, steel, defence, railways, power projects coming under the Central Electricity Authority and irrigation projects coming under the Central Water Commission. Then come the other groups in dwindling order of importance. From 70 to 80 per cent of the steel is consumed by the government sector. The CMO also markets other byproducts of the steel industry like fertilisers and coal-derived chemicals like benzene and toluene.

It is, frankly, not easy to understand the so-called glut in regard to saleable steel against the backdrop of a general excess of demand over supply. Mr S. K. Daspatnaik, general manager, Central Marketing Organisation, whom I met at his headquarters in Calcutta, is clearly a worried man. At the time I met him in the first week of August, he was saddled with 6.58 lakh tonnes of saleable steel, 3.3 lakh tonnes in the stockyards and 2.58 lakh tonnes in the plants. The break-up of steel demand for 1981-82 is shown in Table B :

Table B : Break-up of steel demand (1981-82)

	(Million tonnes)
Bars and rods	4.20
Structurals	1.60
Plates	1.41
Hot-rolled sheets	0.36
Hot-rolled coils and skalp	1.10
Cold-rolled sheets and coils	0.68
Galvanised plain and corrugated sheets	0.21
Steel plates	0.13
Railway material	0.17
Pipes	0.08
Total ..	10.52

Imports of 1.4 million tonnes of steel were planned in 1980-81. About one million tonnes have arrived and the rest is in the pipeline. In addition, imports of another 1.66 million tonnes were planned in the current year. Orders have been firmed up and arrivals have commenced. In the meanwhile production of steel has picked-up. The total availability of steel in April-July was 3.23 million tonnes against 2.47 million tonnes in the corresponding period last year. This comprises 2.19 million tonnes from the integrated steel plants including Tisco, 0.53 million tonnes from mini-steel plants and 0.51 million tonnes imported under back-to-back and buffer schemes (as distinct from OGL). But the offtake of the indigenously produced steel items has fallen because imports under the Open General Licence are cheaper, partly because of lower cost of production of foreign suppliers and partly because of dumping by them.

The Bombay region alone is supposed to have imported about one lakh tonnes of cold rolled sheets. The price of the imported products is about Rs 1,500 per tonne less than the JPC price. Therefore CR sheets are accumulating. Another reason given by the CMO authorities for their accumulation is slump in the automobile, drum barrel and refrigeration industries. Also piling up are bars and rods, with Calcutta, Madras and Bombay ports holding stocks. Other items causing worry include hot rolled coils and skelp. With its improved production, Bokaro produced 65,000 tonnes and Tisco 15,000 tonnes but in the April-July period orders were only to the tune of 36,000 tonnes. Because of accumulation of stocks there are reports of the steel prices tumbling in the open market.

Aberrant situation

What is the remedy for this temporary aberrant situation ? SAIL, according to Mr Khanna, has advised the Government to discontinue OGL imports of steel and also permit, albeit temporarily, exports of certain items whose offtake is proving a problem. The items suggested for export are billets, skelps, cold rolled coils and sheets and large diameter spirally-welded pipes. The Government is considering the SAIL proposal. In fact, there are already reports of some tightening in the form of non-extension of the validity period of licences for import of hot rolled coils by the steel tube industry. It has also been decided not to issue further no-objection certificates for such imports. Another step that has been taken is adjustment in production. For example, Bokaro and Rourkela have been directed to shift from cold to hot rolled products. Recourse to such a measure in the present circumstances may be justified, but it is described as unadvisable on technological grounds. Also, the Steel Ministry has asked SAIL to raise its production of pig iron in order to recoup its losses on account of inadequate offtake of steel. Moreover, there is a shortage of pig iron as SAIL's production target, because of the accent on steel, has not been met. As against the planned production of 500,000 tonnes during the April-July period the actual production has only been around 300,000 tonnes. SAIL is considering an upward revision of its current year's pig iron production target to 14.5 lakh tonnes.

Mr Daspatnaik painted a graphic picture of the difficulties being faced in moving finished steel products on account of inadequate support by the railways. According to him, wagons are either not available or provided only in the form of jumbo-rakes. This, he insists, is an aggravating factor in the present problem of stock accumulation. The present glut does not mean that the country can do without imports in the future. There are various categories of "matching steel" — having particular size, thickness, tolerance and tensile strength — in the area of plates and structurals which are not made in the country and would need to be imported. For example, 0.63 mm gauge cold rolled sheets required for the oil industry have to be imported.

When production lags behind, imports have to be planned, not to speak of the black money that is generated; when production picks up there is a glut. This is no doubt a piquant situation ascribable to some extent to the unwieldy controlled steel distribution system. It would mean that there is a good case to decontrol steel, at least in regard to those consumers which are outside the priority sector. Mr Khanna supports this line of thinking and says that recommendations in this connection have already been made to the Government. There is no doubt that price fixation of steel through market forces would redound to the advantage of consumers, the steel industry as well as the Government.

Steel prices

Price of steel is definitely on the high side, ranging roughly between Rs 3,000 to Rs 6,000 per tonne depending upon the item. The price of steel items is fixed by the Joint Plant Committee on the basis of the average cost of production of all the plants and a 12 per cent return on net worth. The high price is attributable to high cost of production, Steel Development Fund and the huge excise duty.

An amount of Rs 500 upward per tonne is added to the price of steel as a levy which goes into a fund for the development of the steel industry. The usefulness of SDF is debatable. The advantage of creating a fund for development of the steel industry has to be weighed against the correspondingly greater expensiveness of steel, which is an essential infrastructural item. Mr Khanna, as chairman of SAIL, of course thinks that the SDF is a useful measure. However, it may be pointed out that uptil now SDF has been used for reimbursing plants for cost escalation rather than development of the industry. For example, of the expected accrual of Rs 226 crores in 1980-81, Rs 220 crores would go for cost escalation compensation. Little wonder, therefore, that the Government has directed the Bureau of Industrial Costs and Prices to go into the costing of steel industry in order to rationalise the price structure.

If JPC pricing is done with a view to securing a 12 per cent return on net worth the steel industry should show a profit. In 1979-80 SAIL showed a pre-tax profit of Rs 30 crores. Although the report of the Bureau of the Public Enterprises does not give the post-tax figure, SAIL is said to have roughly broken even in 1979-80. The company's financial position for 1980-81 is still under computation. In the current year SAIL ought to do much better because of the improvement in production and the 20 per cent price hike in February. Moreover, the price was further hiked by another Rs 75 per tonne to create a fund for reimbursing steel consumers in the exporting industries for the difference between the imported and indigenous price of steel.

Bhilai: Blaze of molten steel

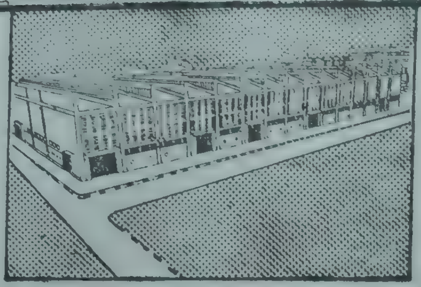
Feather-bedding

High cost of production in the steel industry is partly traceable to the phenomenon that characterises the entire public sector—social burdens. This takes two forms. One, feather-bedding or excess employment, the idea being not only to make steel but also provide jobs. Two, fairly high pay and reasonable good amenities in the form of housing facilities and community services which are available in the townships of all the steel plants. The extent of feather-bedding can be seen from the fact that, according to experts, even in the Indian conditions marked by less mechanisation and lower labour productivity, the work force complement of a one million tonne plant should not exceed 13,000 to 14,000. But in all the plants I visited the work force far exceeds this complement. In the West and Japan the work force complement is 7,500 to 10,000. Barring exceptions warranted on technical grounds, there should be a complete moratorium on further recruitment. Mr Khanna seems to agree with this and says that directives have been sent out to the plants placing curbs on further recruitment. Another major factor responsible for the high per unit cost is the poor capacity utilisation. This is explainable in terms of inadequate infrastructural support, low labour productivity, bureaucratic culture that permeates any government-owned organisation and labour problems. The third major factor accounting for the high cost of production seems to be technology.

In chemical terms conversion of iron into steel means reduction of the carbon element in the metal. There are two main technologies. One is the traditional open hearth technology in which pig iron, scrap, dolomite and limestone are shoved into a furnace fuelled primarily by the coke oven gas. The second, more modern technology is called the LD process, named after two Austrian villages, Linz and Donowit, where it was invented. This method is only different from the open hearth technology inasmuch as the steel-making process is speeded up by blowing or "lancing" oxygen from the top into the furnace. The huge container in which steel is made is, therefore, also sometimes called an oxygen convertor. This technology is 10 times faster than the open hearth furnace and, according to Mr Khanna, yields a 12 per cent more return on investment. Why, then, did India go in the for the open hearth technology? Is it the price the country paid for its nearness to the Russian lobby? The Soviet Union was for a long time using the open hearth technology which it brought to Bhilai and Bokaro.

I put this question to a number of experts at the steel plants as well as Mr Khanna. They insist that it would be wrong to think that India ended up with an outdated technology because of the Russian influence, asserting that in the early fifties, when the steel plants began to come up, the LD process was not yet fully stabilised. Moreover, it was considered wiser to go in for a balance of technology. Thus, while Durgapur (British collaboration), Bhilai and Bokaro put the accent on open hearth furnace, Rourkela went in for the LD process with German collaboration. It may, however, be pointed out that the LD process had begun to be introduced in different parts of the world in the forties. Anyhow, the modernisation and expansion programmes at Durgapur, Bokaro and Bhilai envisage installation of oxygen convertors.

Yet another innovation is oxygen blowing from the bottom instead of the top which further speeds up the steel-making process. It has been introduced in the USA. But Mr Khanna feels that it is too early to think of its application in India. Also under study by the Ministry of Steel and the Mineral Development Board are the three new Swedish iron-making processes—INRED (inten-



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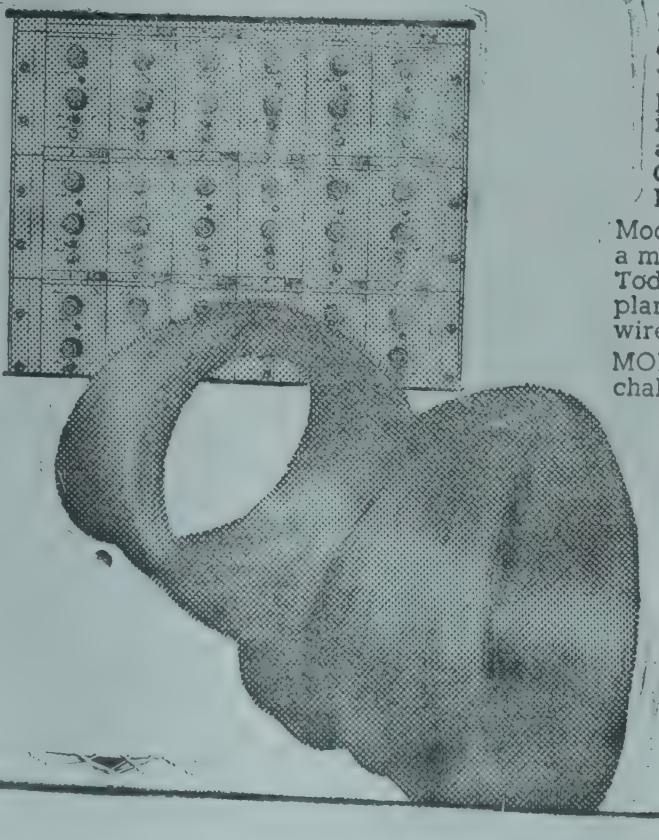

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sive reduction), ELRED (electric reduction) and Plasma Smelt—which are claimed to ensure viability at smaller plant sizes and are said to be 20 per cent cheaper than the conventional blast furnace. *MECON*, which has been studying these processes on behalf of *SAIL*, thinks that these are still at the developmental stage and require further testing before they could be incorporated in a complete steel plant. Continuous casting is another technological innovation on the anvil and is to be introduced gradually. The idea is to eliminate the stage of making solidified steel ingots and straightway cast liquid steel into the requisite mould.

TISCO's performance

Why does *TISCO* perform better than the public sector steel plants? This is a question of hardheaded comparison which brooks no sentimentality. For the last seven years the company has shown 100 per cent capacity utilisation, and even in the difficult 1980-81 it was 101 per cent. With little over 17 per cent of the installed capacity for saleable steel in the country, *TISCO* contributed 25 per cent of the production last year. I put this question to the public sector steel men throughout my tour and came across various explanations and arguments. The most repetitive ones may be enumerated here. One, *TISCO* has the advantage of captive power generation and is, therefore, not subject to the vagaries of power supply. Two, *TISCO* has a larger number of smaller rolling mills which gives it greater flexibility of operation in the face of power fluctuations. Three, *TISCO* has the advantage of coking coal captive mines. Four, most of *TISCO* products are non-JPC items which enable it to profit from free market pricing.

The reaction of an impartial observer to these arguments would perhaps be as follows: (1) With a two million capacity, *TISCO* has 70 megawatts of captive power generation. The public sector plants also have captive power generation whose ratio to the installed capacity is roughly comparable to that of *TISCO*. The Tatas however have the advantage that as and when the need arises they can shut *TELCO* and divert power supply to *TISCO*. (2) The large number of smaller rolling mills—13 in all—no doubt gives *TISCO* great flexibility in adjusting its operation to power supply. On the other hand, the rolling mills in the public sector units are bigger, so that either a mill runs fully or not at all, Ironically, this is the price *SAIL* has to pay for modernity. (3) As for coking coal, *TISCO* is no doubt well-placed in terms of captive mines. But some *SAIL* plants also have captive mines and those which do not have collieries within reachable distance. Some say that the Tatas have shown foresight in paying attention to the improvement of their washeries, so that *TISCO* has a comparatively lesser problem of ash content. (4) The argument about non-JPC items is substantially justified. Over 55 per cent of *TISCO's* product mix is decontrolled items.

In the ultimate analysis, however, it is difficult to resist the impression that the better performance of *TISCO* can only be fully explained in terms of the superior efficiency of private enterprise. *TISCO's* captive power plant often works at more than full capacity. Although *TISCO* owns 6 per cent of the country's coking coal reserves, its contributes 12.5 per cent of the total production. It must also be remembered that *TISCO* has been doing better despite its outdated technology. It has open hearth technology and also the still more outdated process called Bessemer. The company has now embarked on a modernisation programme which is to be completed in January 1983 at a cost of Rs 210 crores. Of this, about Rs 55 crores have been raised as loans abroad.

Power for SAIL

As mentioned earlier, power and coking coal problems will have to be tackled if the steel industry is to progress. Because of the undependability of power supply *SAIL* is being compelled to raise its captive power generation capacity by another 540 megawatts. This, as Mr Khanna points out, will increase the capital cost of steel production. The coking coal problem pertains to the high ash content in it. Indian coking coal has 25 per cent to 28 per cent ash content. But Japan, for instance, uses coking coal with only 10 per cent ash content. A high ash content creates havoc first in the coke oven and then in the blast furnace. The quantity of impurities increases and the coke oven gas produced is correspondingly less. Mr Khanna thinks that one per cent reduction in ash content can make a difference of 13 to 14 per cent in production. While this may be overstating the point, it shows the importance the *SAIL* boss attaches to this problem. With imported coking coal costing Rs 1,250 a tonne, indefinite and unlimited imports is no lasting solution. It seems there is no option to improving washeries and washery technology in the country. In the meanwhile two improvisations are being practised. Blending is being done using 20 per cent non-coking coal in the blast furnace. Secondly, non-coking coal is being pre-heated before being charged into the coke oven. A major aspect of the R and D work at Ranchi attempts to reduce the coke rate in blast furnace through improvement in the blast furnace technology by adopting beneficiation of ores, lime dust injection, coal dust injection and sintering of iron ore. Research is also being done on developing alternative routes to steel production eliminating coking coal.

Since the coke oven gas is the fuel that is burnt in a steel plant, coke oven is the initial and most sensitive stage in the process of steel production. Maintenance of coke ovens in steel plants is, therefore, of vital importance, a lesson that should have been learnt from the crisis of 1970-71. Repair and maintenance of coke ovens requires attention in a cyclical fashion and there is constant vigilance, according to Mr Khanna. As coke oven is the sensitive spot in a steel plant, it is also most vulnerable to labour action. Conversations at various places showed that the authorities fear strikes in the coke oven section. Recently Bokaro's production was completely dislocated because of a strike in coke ovens in June.

Durgapur

The Durgapur steel plant was set up in collaboration with the British Steel Corporation. Originally designed for one million tonne capacity, the plant was expanded to 1.6 million tonnes in 1969. It is based on the open hearth steelmaking technology, having eight furnaces of 220 tonne capacity and one of 120 tonne capacity.

Situated on the northern bank of river Damodar, Durgapur is on the Calcutta-Delhi main railway line and the Grand Trunk Road. The Jharia coalfields and the adjoining Raniganj and Barakar collieries, which together constitute the main source of coking coal in the country, are about 100 kilometres from the plant. Sources of iron ore, limestone and dolomite are, however, not as near. Iron ore comes from Bolani (320 kilometres), limestone from Birmitrapur and Satna (360 and 850 kilometres, respectively) and dolomite from Barduar (582 kilometres). Durgapur provides employment to 33,000 people. This means that for a plant of 1.6 million tonnes there is feather-bedding to the extent of over 7,500. The township, spread over 30 square kilometres, consists of 21,000 residential units and provides reasonably good amenities for health, education and recreation.

As can be seen from Table 1, capacity utilisation at Durgapur has generally been poor. The best year for the plant was 1976-77, when it produced 1.1 million tonnes of ingot steel and 900,000 tonnes of saleable steel. Last year the ingot steel and saleable steel production was one million tonnes and 780,000 tonnes, respectively. The April-

Table 1: Durgapur's capacity utilisation for last 10 years

Year	Ingot steel	saleable steel
1970-71	39.6%	33.3 %
1971-72	43.7%	34.9 %
1972-73	45.1%	38.5 %
1973-74	48.5%	30.4 %
1974-75	51.2%	42.0 %
1975-76	62.5%	60.6 %
1976-77	68.2%	72.7 %
1977-78	68.2%	69.8 %
1978-79	59.1%	62.75%
1979-80	55.5%	48.8 %

July period this year shows an improvement, the targets for both ingot and saleable steel having been fully met.

Power supply is a constant source of worry, says Mr D. Mukerjee, managing director. Durgapur's requirement is 60 mva (mega volt ampere). Of this, 50 mva are supposed to come from the Damodar Valley Corporation and 10 mva from a captive thermal unit. Last year the plant got only 55 per cent of its requirement. This year, despite the improvement, supply remains erratic, as can be seen from the percentages of the actual supply in relation to the indented demand: April 79 per cent, May 74 per cent, June 42 per cent and July 60 per cent. In order to move towards power self-sufficiency two captive thermal units, having a total generating capacity of 60 megawatt, are being built with Polish assistance. One unit will be ready in September 1982 and the other in early 1983. Sometimes power supply for the township, which comes from the Durgapur Projects Limited, a thermal station run by the West Bengal Government, has to be diverted to the plant to ease the power shortage in it.

Although there has been an improvement in the April-July period, the plant's position in regard to availability of coal, iron ore, limestone and dolomite has generally been uncomfortable. Durgapur's daily coal requirement ranges between 4,000 to 7,000 tonnes. It has been getting, on an average, about 66 per cent of this quantity. Iron ore supply has often been affected by non-availability of railway wagons. Even after the recent improvement the shortfall remains 25 to 30 per cent. Limestone and dolomite supply has improved. In 1980-81 the planned requirements and actual supply were as follows:

('000 tonnes)

	Plan	Actual	
Coal	2,774	1,869	67%
Iron ore	1,764	1,014	57%
Limestone	612	369	60%
Dolomite	225	73	32%

Mr Mukerjee is worried about the problem of high ash content in coking coal. The ash content in the coal Durgapur gets is about 28 per cent and they would happy if it could be reduced to 25 per cent. A high ash content means additional unproductive elements in the blast furnace. Because of the superior coking coal available to it, Japan uses only 500 kilograms of coking coal to make one tonne of steel compared to 900 to 1000 kilograms in India.

Durgapur has a modernisation-cum-expansion programme which would take the plant's capacity to two million tonnes. The consultancy remains with the British Steel Corporation. The programme, estimated to cost over Rs 1,000 crores, is included in the Sixth Plan. It is, however, running behind schedule. The oxygen-blowing LD steel-making process is to be introduced with the installation of two convertors. Continuous casting is also to be introduced. Other prominent features of the programme include addition of one blast furnace to the existing four and installation of one more coke oven battery.

A major function of Durgapur is to manufacture wheels and axles for the railways. Low or negative profit margins on supplies to the railways, along with poor capacity utilisation, explain the losses incurred by the plant. Whereas the cost of production of a wheel set works out to Rs 6,600, Durgapur gets only Rs 4,700 from the railways. On sleepers the plant has been losing Rs 300 per unit. The post-tax losses notched up by the plant are as follows : 1975-76 Rs 20 crores, 1976-77 Rs 7.7 crores. 1977-78 Rs 17.5 crores. 1978-79 Rs 4 crores (profit). 1979-80 Rs 22 crores and 1980-81 Rs 8 crores.

Situated as it is in West Bengal, Durgapur is regarded as a difficult place from the point of view of industrial peace. Despite my repeated requests, the authorities, on one pretext or the other, did not give me an opportunity to meet a workers' representative. Although there are a number of unions, the management deals mainly with the Marxist-oriented CITU-led union which, in a state ruled by a Marxist government, is only diplomatic. The last four months, I was told, have been quiet, barring some minor trouble in the blast furnace. Table 2 gives the loss of manhours as well as the production loss in Durgapur on account of labour trouble.

It was the wheel and axle shop which made the most outstanding impression during a visit to the plant. A red hot steel ingot has to go through 13 processes of compression and smoothening before it becomes a railway wheel. The markings on the machines show that these were supplied by a consortium of British companies. Another lasting impression is the stringent check at the gates, whether it be a worker or officer, to prevent theft of materials. The boots of cars and scooters are invariably opened by the security men. It may look demeaning, but there seems to be no other way out.

Table 2: Durgapur industrial relations

Year	Loss of Manhours '000	Production of ingot steel '000 tonnes
1970-71	1,760	634
1971-72	825	700
1972-73	140	703
1973-74	231	776
1974-75	117	819
1975-76	2	1,001
1976-77	Nil	1,091
1977-78	14	1,092
1978-79	72	946
1979-80	167	882
1980-81	499	741

Alloy Steel Plant—Durgapur

As its name suggests, this plant produces special alloy steels, its customers including Ministry of Defence, automobile industry, *TELCO*, forging industry and *BHEL*. With a capacity of 60,000 tonnes of saleable steel, the plant also has competitors like the public sector VISL at Bhadravati, Mahindra Ugine (Musco), Birla-owned Bihar Alloy and Guest Keen Williams. Mr M. C. Tarafdar, acting executive director, frankly admits that his main problem is a higher cost of production because of higher costs, which is a euphemism for feather-bedding.

Alloy Steels is a power-intensive plant, requiring 50 mva but getting on an average 35 mva. Last year DVC imposed "restrictions" for 95 per cent of the time, when the supply was not even 35 mva. In the first quarter of the current year the DVC supply has improved, the restrictions having come down to 63.7 per cent. As a result, production has improved. In April-July the plant produced 21,552 tonnes of ingot and 10,156 tonnes of saleable steel as against 12,307 tonnes of ingot and 6,273 tonnes of saleable steel in the corresponding period of 1980-81. Capacity utilisation has been better than the adjoining integrated plant but, as can be seen from Table 3, shows a downward trend. After

Table 3: Alloy Steel Plant's capacity utilisation

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Ingot steel	90.3%	94.8%	97.2%	97.3%	76.7%	70.4%
Saleable steel	78.2%	86.4%	81.4%	81.4%	76.1%	69.5%

1974-75 and barring 1979-80 the plant has been making profit as follows: 1975-76 Rs 4 crores, 1976-77 Rs 4.17 crores, 1977-78 Rs 2.14 crores, 1978-79 Rs 2.02 crores, 1979-80 Rs 7 crores (loss). Table 4 shows the man-hour losses on account of labour trouble. Here also the management, for obvious reasons, recognises the CITU-led union.

Alloy Steels has a two-stage expansion programme. Under the first stage a 50 tonne capacity electric arc furnace has been installed and is scheduled to be commissioned in September. This would increase the plant's power requirement by 25 mva but DVC, according to the managing director, Mr Tarafdar, has indicated its inability to meet the additional need before October. Will the new furnace remain idle during this interrugnum? This should give some insight into the problems faced by the steel industry on account of inadequate power and the resultant under-utilisation of capacity. Anyhow, under the first stage expansion the ingot and saleable steel capacity of the plant will increase by 600,000 tonnes and 400,000 tonnes, respectively. The additional production will also meet *BHEL's* requirement of blooms for making boiler tubes which are at present being imported. Under the second stage, which is to be completed in 42 months with effect from August, a vacuum technology, involving secondary refining in ladle, is to be introduced, probably in collaboration with Standard Meso of West Germany. In this plant also the innovative continuous casting technology is to be introduced. The second stage will add another 100,000 tonnes to the plant's capacity.

How will the expanded Durgapur alloy unit co-ordinate with the newly completed alloy unit at Salem? Salem has facility only for cold rolling of stainless steel, which means that for some time it will have to depend on import of hot rolled coils. The idea is that eventually Alloy Steel should supply stainless steel slabs to Bokaro, which would roll these into stainless HR coils for supply to Salem.

Table 4: Alloy Steel Plant: Man-hour loss

	Direct	Indirect
1977-78	3,582	431
1978-79	44,844	1,11,256
1979-80	60,652	64,793
1980-81	89,200	1,009

The technical know-how for Alloy Steel came from Atlas of Canada and the machinery was provided by the Japanese. A visit to the plant showed that now some Italian machinery is beginning to be inducted. Three other impressions remain. A 2000 tonne press had just been renovated entirely with Indian expertise. A rolling unit was idle, showing an imbalance between ingot-making and rolling capacities which is now planned to be rectified. In a bar mill a red hot steel bar was being shifted on the rollers by a worker holding an iron rod. God forbid, one slip and a fall on the bar and the worker would be scalded beyonded recognition, if he were to live. Such manual handling is indicative of technological primitiveness and should be stopped forthwith.

Bokaro

The Bokaro steel plant has for the current year the challenging production target of 2.05 million tonnes of ingot steel and 1.6 million tonnes of saleable steel, which represents an increase of 122 per cent and 90 per cent over the last year's production of 0.92 million ingot steel and 0.84 million saleable steel. Because of severe power and coal constraints, last year was a particularly difficult one, with capacity utilisation for ingot and saleable steel falling to 39 per cent and 62 per cent, respectively. Of Bokaro's requirement of 225 mva, 62 megawatt is firm power available from the captive station and 145 mva are contracted for supply by *DVC*. Last year *DVC* imposed restrictions ranging between 5 and 116 mva for a duration of 7,428 hours, and for most of this period restrictions were below 50 mva.

Barring June, when there was serious dislocation of production because of labour trouble in coke ovens, there has been considerable improvement in the first quarter of the current year (See Table 5). But the power supply, though improved, remains erratic. For example, on July 12, 13 and 14 various mills of the plant had to remain shut on account of *DVC* restrictions to 29 mva. Table 6 shows the production loss suffered by Bokaro in 1980-81 and April-July 1981-82 on account of power shortage.

The blooming mill at the Durgapur steel plant

But it is raw materials which is proving a real headache for Mr D. R. Ahuja, managing director. The stocks of coal are comfortable, but the quality of raw materials supplied is poor and erratic. Against a norm of 18.5 per cent the ash content is 21 per cent. Regarding other raw materials, even the stocks are inadequate. Mr Ahuja points. that against a norm of 15 day's stocks he had (on August 9) stocks as follows: iron ore six days, limestone one day and

Table 6: Bokaro—Production loss

Year	Reason	Ingot Steel T	Saleable Steel T
1980-81	Power	80,880	3,19,308
April-July 1981	Power	—	12,967

Table 5: Bokaro—Production targets/Achieved

	1980-81		1981-82							
			April		May		June		July	
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
Ingot Steel	18,20,000	9,22,546	1,50,000	1,45,047	1,55,000	1,56,021	1,60,000	1,13,725	1,65,000	1,55,539
Saleable Steel	15,00,000	8,44,058	1,17,300	1,11,164	1,21,300	1,14,374	1,25,300	1,12,486	1,28,500	1,18,932

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t, Iron Market Bombay-400 009 Phone : 327476

Table 7: Bokaro—Raw materials plan/Actual receipts

	1980-81		1981-82							
	P	A	April		May		June		July	
			P	A	P	A	P	A	P	A
Coal	30,05,800	26,54,817	2,54,000	2,29,200	2,66,000	2,47,000	3,07,000	2,04,300	2,55,200	2,36,300
Iron ore lump	16,90,000	11,50,716	1,31,000	48,300	1,31,000	1,00,200	1,31,000	1,35,900	1,60,000	1,29,800
Iron ore fines	26,51,000	15,26,631	2,37,000	1,78,600	2,37,000	1,75,600	2,52,000	1,75,000	3,00,000	1,55,900
Limestone BF Gr.	9,70,000	5,85,506	70,000	32,100	70,000	33,900	70,000	49,300	80,000	59,100
Limestone SMS Gr.	8,19,550	3,40,107	63,000	39,400	63,000	25,600	65,000	32,800	72,000	49,305

dolomite 15 days. The main problem is tardy movement by the railways. Table 7 shows that even during the last quarter, when production is supposed to have picked up substantially, Bokaro never got the requisite supply in regard to any raw material.

Bokaro is a growing plant. At the first stage its capacity was 1.6 million tonnes which has now been raised to 2.5 million tonnes and will eventually touch four million tonnes at the end of the Sixth Plan. Mr Ahuja emphasises that at present there is a slight imbalance as between the ingot and saleable steel capacities. Against an ingot capacity of 2.5 million tonnes the saleable steel capacity should be 1.95 million tonnes, but Bokaro's is only 1.35 million tonnes. Now two groups of soaking pits are ready for commissioning which would take the capacity to the requisite 1.95 million tonnes. The managing director is, therefore, at pains to point out that Bokaro's saleable steel capacity for 1981-82 works out to only 1.70 million tonnes.

The blowing-in of the fourth blast furnace on May 27 heralded the beginning of work on the four million tonne stage. On July 29 the fifth coke oven battery was commissioned. Efforts are being made to prevent any further slippage in the schedule, which is as follows: 3 x 60 mw captive power plant by the end of 1982, steel melting shop-II by September 1982 and cold rolling mill-II by September 1983. The main reason given for the delay is the grant of supply contract to indigenous manufacturers. Bokaro is claimed to be some kind of a swadeshi plant. As much as 60 per cent equipment, 94 per cent structurals and 61 per cent refractories were procured indigenously during the first stage, whereas the corresponding figures for the expansion stage are 88 per cent, 100 per cent and 100 per cent, respectively. For various reasons, Hindustan Steelworks Construction Limited is also going behind schedule in regard to the civil works.

Nonetheless, Bokaro retains all the trappings of the Russian presence. Although there are convertors based on oxygen lancing, open hearth technology is very much in evidence. The additional 300 tonne convertors to be installed will of course be based on the oxygen lancing or LD process, which the Russians have also imbibed. On the day I was in Bokaro there was a visit by the Russian Charge d'Affaires. The number of Russian technicians is placed at 166. Bokaro, however, will not have continuous casting planned to be introduced in other plants.

Barring the emergency year of 1976-77, when it made a net profit of Rs 2 crores, Bokaro has been net loss-maker as follows : 1977-78 Rs 5 crores, 1978-79 Rs 37 crores, 1979-80 Rs 34 crores and 1980-81 Rs 20 crores. Apart from under-utilisation of capacity, an important reason, according to Mr Ahuja, is the high depreciation because of comparative newness of the plant. To this may be added the high overhead and labour costs. Bokaro gives employment to 44,000 people. The plant also has a multiplicity of labour unions. Recognition is given, as elsewhere, to the union toeing the political lines of the state government. Since Bihar is ruled by Congress (I), INTUC is the recognised union. Table 8 gives a picture of industrial relations at the plant.

During a visit to the plant I found the engineer supervising a huge blast furnace also knew Russian, having been trained in the USSR. The equipment was both Russian and Indian, the indigenous markings belonging mostly to *HEC*, *BHEL* and Jessop. One convertor was down, for relining of its walls with refractory fire bricks, which are sometimes imported. Pouring of hot metal (molten iron) from a crane-operated huge ladle into the convertor provided an awesome, synging sight. You cannot look at the blazing scene for more than a minute without hurting your eyes. Conversion of iron into steel means reduction of the carbon content in the metal. The process is speeded up through blowing of oxygen into the convertor from pipes coming in from the top. The hot strip rolling mill was idle, not being fed by the other mills and showing the same type of imbalance noticed earlier during the tour.

Rourkela

Set up with German collaboration in 1958, Rourkela was the first plant in the country to go in for the LD steel-making process involving oxygen lancing. It has been among the better performers and a net profit-maker, as can be seen

Table 8 : Bokaro—Industrial relations

Year	Manhours lost	Production Loss in Ingot steel	Production Loss in Saleable steel	
1977-78	4,46,481	1,30,851	81,091	(High pressure welders strike from 27th February to 27th March 1978)
1978-79	1,21,200	3,360	2,698	
1979-80	80,332	9,600	8,733	
1980-81	1,34,856	9,637	9,856	
1981-82 April-July	89,115	16,010	9,516	(All in June 1981 due to strike in Coke Oven Plant)

Table 9 : Rourkela—Capacity utilisation

Items	1976-77	1977-78	1978-79	1979-80	1980-81
Ingot Steel	83.5	78.3	73.3	70.4	64.7
Saleable Steel	95.9	96.2	85.0	85.3	80.4
CAN Fertilizer	74.0	70.2	70.2	56.3	43.0

Table 10 : Rourkela—Financial results

	1976-77	1977-78	1978-79	1979-80	1980-81
Net profit .. .. Rs in crores)	28.68	21.70	46.75	47.65	14.45
Gross Block (Rs in crores)	508.57	530.98	564.56	627 10	705.63
Capital Employed .. .. .. (Net Block+Working Capital) (Rs in crores)	327.63	367.36	415.47	530.09	599.65
Sales Turnover .. .. .. (Rs in crores)	377.38	439.54	367.69	481.94	484.02
Percentage of Net Profit to Capital Employed	7.70	5.91	11.25	8.99	2.41
Percentage of Turnover to Capital Employed	101.27	83.58	88.50	90.92	80.72
Percentage of Net Profit to Turnover	7.60	4.94	12.70	9.89	2.99

Table 11 : Rourkela—Power supply

Period	No. of system disturbances	Drawal restriction by OSEB (hrs)	Loss of Saleable Steel (T)	Loss of CAN Fertilizer (T)
1974-75	102	3,078	53,174	7,851
1975-76	66	129	7,492	2,518
1976-77	106	2,116	43,844	9,290
1977-78	45	348	5,780	1,569
1978-79	59	232	13,050	5,045
1979-80	29	4,923	1,05,005	1,10,711
1980-81	43	5,574	73,430	68,569

Table 12 : Rourkela—Power supply

Month	Average receipt	No. of system disturbances	Restriction		Loss of production	
			MW	Hours	Saleable Steel	CAN fertilizer
April 1981	56.05	11	No power 35 45 55 65	4 14 52 51 598	5,500	3,500
May 1981	53.779	16	25 35 45 55 65	2 23 150 196 349	2,845	3,881
June 1981	54.303	13	No power 25 35 45 55	8 51 38 13 609	3,000	4,330
July 1981	73.623	4	45 55 65	13 31 34	500	1.406

from Table 9 giving capacity utilisation and Table 10 showing the financial results. But, ironically, Rourkela is the only plant where ingot steel production in the last quarter has come down (by 2.7 per cent) compared to the corresponding quarter of the previous year. However, Dr N. S. Datar, managing director, is not unduly perturbed about this describing it as a minor fluctuation after the establishment of a fairly high performance plateau. Nonetheless, complacency would be unwarranted for Rourkela's ingot steel capacity utilisation last year at 64.7 per cent was not exactly brilliant. Anyhow, saleable steel production in the last quarter shows an impressive 32 per cent improvement compared to the corresponding quarter in 1980-81.

Dr Datar faces the same problems as his counterparts in regard to availability of power, coal and railway transport. Rourkela's normal power requirement is 70 to 75 megawatt. Power supply to the plant is subject to fluctuations, especially in the summer months, because the Orissa State Electricity Board grid generation is predominantly hydel with only one thermal station at Talcher. Tables 11 and 12 show the position in regard to power supply to the plant in the earlier years as well as in April-July 1981. Tables 13 gives the position in regard to wagon supply. Tables 14 and 15 give the position about coal supply in April-July 1981 and the earlier years, respectively.

The plant does not have much problem in regard to other raw materials. Captive mines at Barsua, having ore beneficiation facilities, and high grade ore mines at Kalta meet the bulk of the iron ore requirement. Limestone comes from Purnapani and Satna. Dolomite is obtained from the quarry at Baraduar.

Since Rourkela was the only plant which started in a full-fledged manner with the oxygen blowing process, it had to have an oxygen plant which would also yield nitrogen as a by-product. Therefore, Rourkela is the only steel plant having a full-scale fertiliser unit attached to it which produces calcium ammonium nitrate (CAN). But one of the two ammonia units of the fertiliser plant has been getting naptha from outside, presumably because of shortage of hydrogen available from the coke oven gas. To this extent the fertiliser unit has lost the advantage that should normally accrue to it as an appendage of the steel plant. Its capacity utilisation is poor.

Some of the other noteworthy points made by Dr Datar are as follows :

1) Because of accumulation of stocks, Rourkela has been asked to curtail its production of cold rolled

Table 13: Rourkela—Wagon supply

(Average/day)

	KC	CV	CRT	BKC	BOX	BCX	BFT	BOI
Requirement	15.0	20.0	10.0	10.0	80.0	2	9	15
1978-79 ..	11.0	11.0	4.1	4.2	48.0	1.3	4.0	6.2
1979-80 ..	8.8	8.5	2.7	2.8	55.1	1.6	1.7	4.5
1980-81 ..	5.5	6.2	1.7	2.1	53.6	1.0	2.0	2.6
April 1981 ..	2.5	8.6	3.1	0.6	43.2	2.5	1.0	2.5
May 1981 ..	4.5	13.5	2.5	0.7	56.4	1.7	1.0	5.4
June 1981 ..	1.9	12.9	—	0.7	59.4	—	1.5	0.9
July 1981 ..	2	9	1	0.2	56	0.2	6	9

Table 14: Rourkela—Coal receipt

Month	Plan	Actual	Percentage	Stock	
				Opening	Closing
April 1981	253,440	151,251	59.7	68,067	78,512
May 1981	260,640	120,999	46.4	78,512	80,497
June 1981	221,820	137,979	62.2	80,497	100,068
July 1981	202,521	139,626	68.9	100,068	102,402

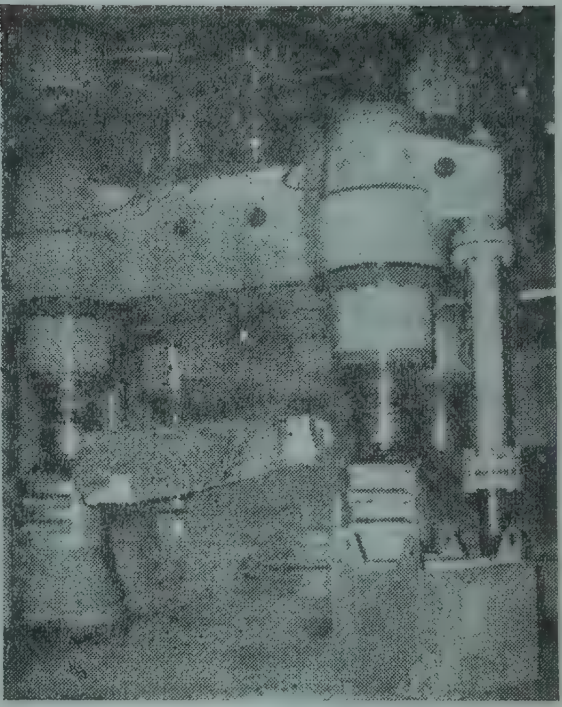
There was no shortage of other raw materials.

Table 15: Rourkela—Coking coal supplies

Month/Year	Plan (T)	Actual (T)	% Fulfilment	Stock at the beginning of the year	Stock at the end of the year
1976-77	21,91,530	21,57,624	98	1,61,174	1,09,429
1977-78	22,90,616	20,76,254	80	1,09,429	81,885
1978-79	24,72,265	20,42,589	82.6	81,885	24,171
1979-80	25,65,912	18,05,379	70.9	24,171	12,588
1980-81	26,76,024	18,44,979	68.9	12,588	68,067

Table 16: Rourkela—Industrial relations

Year	Manhours loss	Production loss (Saleable Steel) (in tonnes)	Value of Production loss (saleable steel) (Rs in lakhs)
1975-76	1,306	2,406	38.85
1976-77	Nil	Nil	Nil
1977-78	88,474 (Direct) 22,392 (Indirect)	13,388	330.31
1978-79	1,55,746 (Direct) 25,344 (Indirect)	48,625 2,500 51,125	1,481.02 61.65 (Due to Contractors' labour strike) 1,542.67
1979-80	1,00,840 49,171 (Due to Teacher's Strike) 1,50,011	16,212	467.88
1980-81	2,03,376 3,93,936 (Due to Orissa *bundh*) 5,97,312	5,500 9,400 (Due to Orissa *bnndh*) 14,900	235.50 286.89 (Due to Orissa *bundh*) 522.39



The 2,000 tonne press at the Alloy Steel Plant, Durgapur.

by 50 per cent and switch to hot rolled products.

2) Apart from the shortage of wagons, Rourkela also faces the problem created by the insistence of the railways on providing jumbo-rakes.

3) Labour in Rourkela may not be as troublesome as in the West Bengal-Bihar belt but Dr Datar has his share of problems, as should be evident from Table 16. Hind Mazdoor Sabha is the recognised union but there are eight others. "Because of inter-union rivalry, much of my time is taken up in listening to all of them", says the managing director.

4) In order to utilise the granulated slag available at Rourkela and the granulated slag expected to become available at Bhilai on completion of expansion of their blast furnace capacity *SAIL* has decided to set up a cement plant at Rourkela which will have a capacity of 1.89 million tonnes and cost Rs 120 crores. Tenders will soon be floated and after that the plant will take 48 months to complete, which means that it will spill beyond the Sixth Plan. An idea of cost escalation and, therefore, the harmful effect of delays can be had from the fact the Sixth Plan mentions a figure of only Rs 50 crores for the plant. A clinkerisation unit to be located near the limestone deposits at Chilhati in Madhya Pradesh will feed the cement plant.

5) The situation at the coke ovens is a constant source of worry. Rourkela had a strike in this sensitive area in the last week of June. Communist unions are becoming strong in the ovens. A programme to rebuild the coke ovens has been undertaken. By the end of October 35 of the 290 ovens would be rebuilt.

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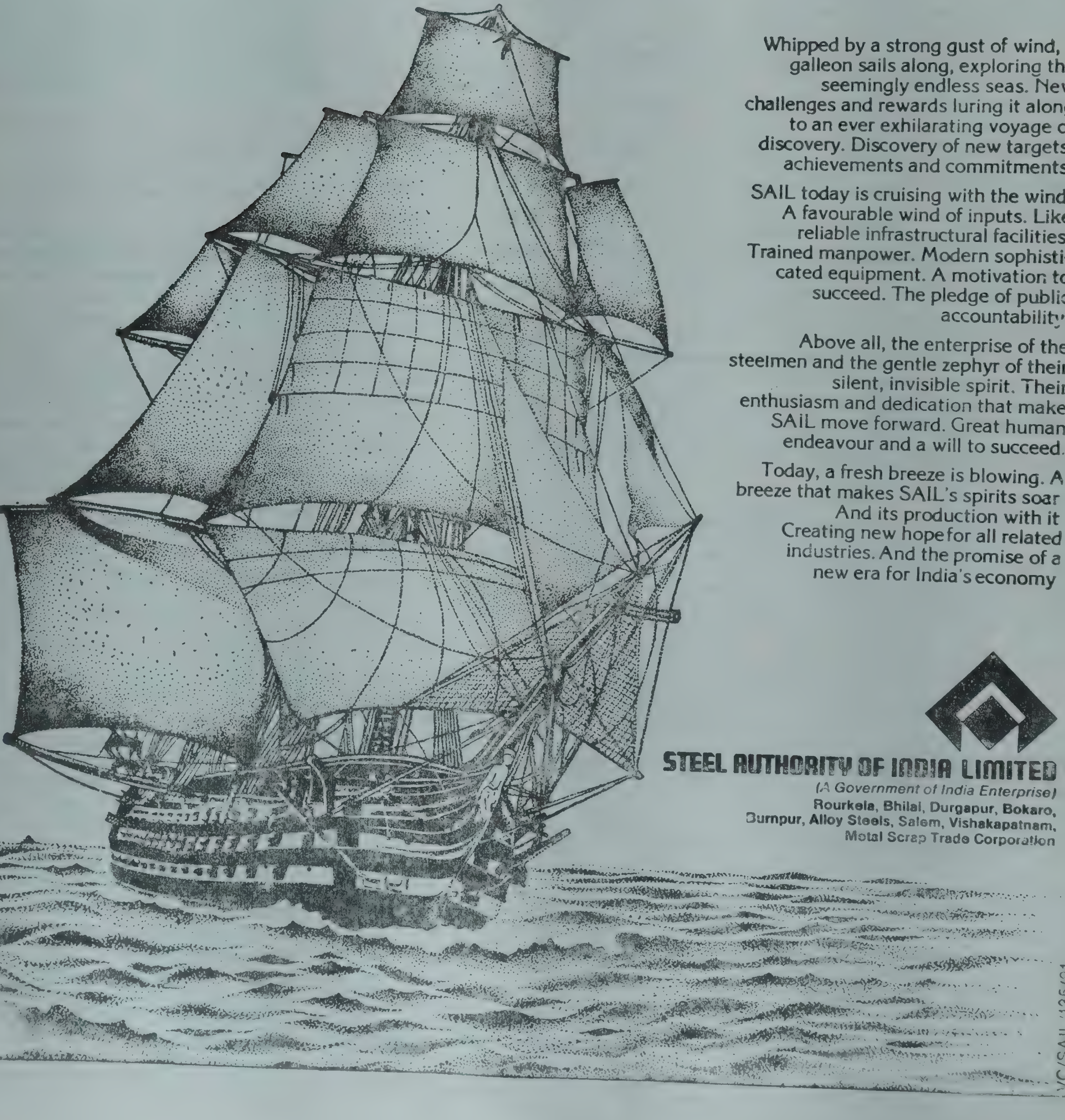

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6) Rourkela has perhaps the most impressive record of safety among all the steel plants and has won the National Safety Award several times.

An important expansion programme at Rourkela pertains to the silican steel project which will produce 37,500 tonnes of cold rolled grain-oriented steel and 36,000 tonnes of cold rolled non-oriented steel. Silican is a superior type of steel which is different from the average quality because it has only 3.5 per cent carbon. The consultants for the project are *ARMCO,* an American company which is supposed to be a leader in silican steel technology. Estimated to cost Rs 110 crores, the project has already been much delayed. The silican unit was supposed to have trial runs at the beginning of this year but now it is doubtful whether that can be done even by the middle of 1982. The main reason for the delays is too much of sub-contracting for the project, partly because of indecisiveness in planning and partly because of exertion of pressures by different lobbies in New Delhi. Initially the idea was to give the construction contract to Demag of Germany which, along with Krupp, had built the Rourkela plant. Mid-stream, after the passage of some months, it was decided, under pressure from *DGTD,* that the work should be assigned to Indian companies who could do the job. But, surprisingly, the main parts of the contract were given to *EPI* and *MECON*, both of which are consultancy organisation and have no wherewithal to themselves undertake construction. As a result, they have had to in turn give contracts and sub-contracts down the line, resulting in a multiplicity of parties involved in the job. In view of the increasing sophistication of technology no one company can, admittedly, nowadays do an entire job. But this silican project is an example of excessive multiplication, which means delay. At least this is the impression gained by me on talking to engineers at the construction site of the project.

Bhilai

Bhilai demonstrates the point made earlier, about low target fixation. In the first quarter of this year production of saleable steel at 534,000 tonnes exceeded the target of 525,000 tonnes and yet it represented a fall of one per cent compared to the production of 540,000 tonnes in the corresponding period of 1980-81. Mr N. K. Mitra, managing director, says that during the last few months coal (last year coal supply was erratic and inadequate), and other raw materials have not been a problem but the supply of power remains inadequate. With a captive power plant of only 36 megawatt, this biggest steel plant of SAIL is dependent for power supply on the Korba thermal station.

Comparatively speaking, Bhilai has a fairly distinguished record in capacity utilisation, which largely explains why it is also a net profit-maker. Table 17 and 18 give an idea of the shortage of power supply in 1980-81 and April-July 1981. Table 19 shows the net profit made by the plant. Table 20 gives the position regarding capacity utilisation, production, coking coal and production loss on account of industrial relations. Table 21 gives a detailed picture of the inadequacp of wagon supply.

Table 17: Bhilai—Loss of production due to powerrestriction during 1980-81

Units affected	Stoppages (Hrs. Mts.)	Loss of production (Tonnes)
Sinter: SP—I	570-40	33,520
SP—II	1,135-05	79,325
Billet Mill	37-05	2,000
Rail & Strl. Mill	259-45	28,160
Merchant Mill	592-10	46,340
Wire Rod Mill	809-35	59,540
Foundry	994-55	932

Table 18: Bhilai—Loss of production due to powerrestrictions

	April 1981	May 1981	June 1981	July 1981
Total duration of restrictions (hrs)	447.6	302.6	362.4	356.6
Loss of production:				
Sinter	30,910	30,420	40,410	22,470
Hot metal	—	600	—	120
Ingot steel	—	1,830	—	1,220
Billets	—	5,330	5,180	—
Rail & Strls.	340	2,340	4,950	920
Merchant products	3,710	6,070	7,850	2,840
Wire rods	5,530	5,330	15,820	5,020

Table 19: Bhilai net profit

Year	(Rs in lakhs)
1976-77	4.905
1977-78	4.035
1978-79	4.996
1979-80	3.953
1980-81 (provisional)	1.801

Bhilai has an expansion programme under which it will acquire the LD or oxygen convertor technology, continuous casting technology and a white plate mill. The work, started three years ago, was supposed to have been completed at the end of this year. But here also delays have occurred. The white plate mill will now start in the middle of 1982 and the convertor and continuous casting towards the end of 1982, the former getting slabs from Bokaro for rolling till the expansion programme is fully completed.

Some other points made by Mr Mitra include :

1) The recognised labour union is that of *INTUC*, which means it is again a union whose political complexion is the same as that of the State Government (Madhya Pradesh is ruled by Congress (I)).

2) Coke ovens are being attended to. A battery of 65 ovens has been rebuilt. Some labour trouble, however, is there, mostly from leftist unions.

3) The managing director does not agree that excessive sub-contracting is a reason for the delay in implementation of the expansion programme.

4) Rails and structurals have been the main products of Bhilai, the former being sold to the railways at 20 per cent less than the cost of production. Attention will also now be paid to high quality steel and product development.

A tour of the Bhilai plant left the following lasting impressions :

Table 20 : Bhilai's capacity utilisation and loss of man-hours

(Unit : '000 tonnes)

Particulars	1976-77			1977-78			1978-79			1979-80			1980-81			1981-82		
	Rated capacity	Production	Capacity utilisation	Rated capacity	Production	Capacity utilisation	Rated capacity	Production	Capacity utilisation	Rated capacity	Production	Capacity utilisation	Rated capacity	Production	Capacity utilisation	Rated capacity	Production	Capacity utilisation
Ingot steel	2,500	2,302	92.1	2,500	2,371	94.8	2,500	2,200	88.0	2,500	2,108	84.3	2,500	2,041	81.6	836	631	75.5
Saleable steel	1,965	2,019	102.7	1,965	1,930	98.2	1,965	1,846	93.9	1,965	1,706	86.8	1,965	1,818	92.5	657	534	81.2

Particulars	1976-77			1977-78			1978-79			1979-80			1980-81			1981-82 (April-July)		
	Requirement	Receipts	%	Requirement	Receipts	%	Requirement	Receipts	%	Requirement	Receipts	%	Requirement	Receipts	%	Requirement	Receipts	%
Coking coal	3,746	4,007	107.0	4,006	3,995	99.7	4,006	3,752	93.7	4,000	3,577	89.4	3,914	3,516	89.8	1,621	1,273	78.5

Loss of production due to industrial relation problem (in tonnes)

	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82 (April-July)
Ingot Steel	Nil	3,600	34,741	6,212	1,374	27,420
Saleable Steel	Nil	21,380	19,383	23,210	23,820	24,500

1) The Russians are very much in evidence.

2) The machinery and equipment for the expansion programme is being supplied by the Heavy Engineering Corporation, *BHEL, MAMC,* Braithwaite and Jessop. The huge Russian-built "roughing stand" in the plate mill is a truly awesome sight. The railways had to build special wagons to transport it from Visakhapatnam. Apart from Russians, the consultancy is with *MECON, EPI* and Instrumentation Limited. Excessive sub-contracting is again in evidence. Because of the delays, the cost of the expansion programme has now been revised to Rs 1,460 crores. The civil construction work is with the trouble-racked Hindustan Steelworks Construction Limited. But I am told that the company's new boss, Mr Shambu Kumar, is a tough, no-nonsense executive.

3) Excessive smoke from the chimneys shows that the gas cleaner is not working. But I am told that the township is so located in relation to the general direction of the wind that the smoke is blown away from it.

4) Since the demand of rails by the railways is down, the rails shop is working only at half of its 500,000 tonne capacity.

5) The wire rod mill is not working because there is no gas for the soaking pits. And there is no gas for the soaking pits because one blast furnace is under repair. (Mr Mitra later agreed that this showed managerial deficiency).

6) In the steel melting shop dolomite is being shovelled into the furnace to line the walls.

7) In the blooming mill it is difficult to look at the red hot ingots whose temperature is 1300 degrees centigrade

8) Bhilai has 60,000 employees, showing a high degree of feather-bedding.

Incidentally, Mr Mitra has just taken over as managing director from Mr E.R.C. Sekhar, who has left to join the Birla-managed consortium called Pan African, which has bagged a huge contract to build a 5.2 million tonne steel plant in Nigeria.

COMMERCE

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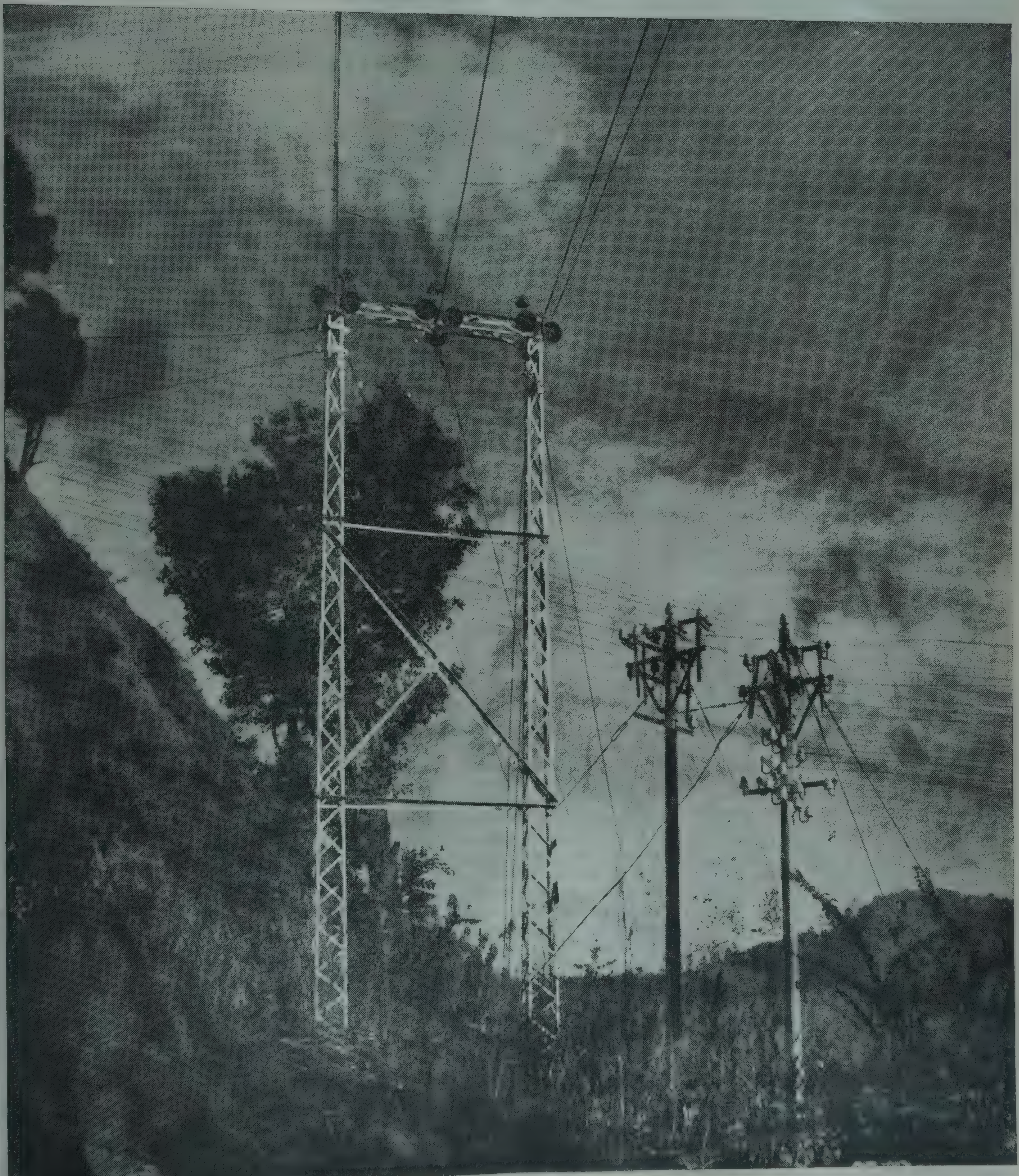
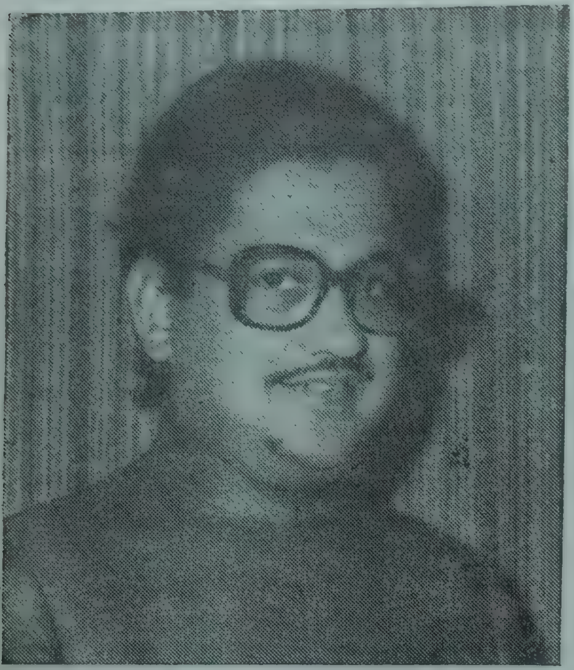
UP STATE ELECTRICITY BOARD

– A FEATURE





Efforts to speed up power development in Uttar Pradesh

By **SUNIL SHASTRI**

Deputy Minister for Energy, Uttar Pradesh

THE Uttar Pradesh Government is seriously concerned about the situation of power generation in the State. As has been its experience, breakdowns, often serious, occur now and then and such failures affect the life of the community. However, since the time the Chief Minister, Mr Vishwanath Pratap Singh, has taken the portfolio of energy under him, he has initiated some new policies and there has been quite an improvement. The Chief Minister is seriously trying to find out the causes of failures. For instance, in his inspection of the Obra thermal power station he found that the low generation there was mostly due to shortage of coal and the inferior quality of coal supplied to the plants. Human factors also contribute to the proper functioning of power plants. The staff of the State Electricity Board has many problems which also need to be resolved. Towards that purpose the UP Government has set up a Pay Commission and its report is expected soon.

The Chief Minister's move for participation of the workers and engineers in the management of the SEB has been hailed by all. It is expected that these steps will go a long way to facilitate better generation and supply of power and ultimately help the consumers as well as the workers.

On the orders of the Chief Minister, day-to-day monitoring of power supply also has been started. The Government is also seriously thinking of some other renovations in the management and functioning of the SEB with a view to ending the present power crisis.

As we know, power is the most important factor in the development of a nation. Without it, it is impossible to keep pace wth other countries. Ours is a backward country compared to many others and for our progress quick development is needed in agriculture and industry. Ours is mainly an agricultural country and there are still large tracts of agricultural land to be developed and made productive. We are trying to bring such areas under cultivation by introducing electricity in the rural areas. Electricity, in its progress into rural areas, has also helped establish small rural industries and inducing these areas to rise out of social and economic backwardness.

Our aim is to make power available in every part of UP for quick development of agriculture and industries, and for that we need more power than is being generated now. This Government is very much aware of this need and is trying its best to raise the installed capacity. Thirty-five per cent of the total outlay of the Sixth Plan (1980-85) is earmarked for this purpose.

Power projects are costly and during the last few plans it was somehow not possible to find the needed finances from our limited resources. In such cases Government has to take help from sources like the World Bank and other international agencies to ensure that progress continues on the projects taken in hand. Recently, the State Government has taken a decision to meet the entire cost of the Anpara 'B' thermal project from the provisions made in the Sixth Plan.

The Uttar Pradesh Government intends to meet in full the requirements of power in all spheres of the State by 1990 and its plans for increasing the generation have been drawn up with that end in view. At present the total installed capacity is 3,500 mw and the Government intends to raise it to 14,000 mw by the end of 1990.

It is expected that by the end of the Sixth Plan the installed capacity will be further raised by 2,000 mw and, during the Seventh Plan by another 7,400 mw. Besides these, the State is expected to get a larger share from the Central projects. All these will go a long way to meet most of our requirements.

Of the Central projects the most important ones are the Narora atomic power project and the thermal project in the area of Singrauli coal mines in this State. Work on these two projects is progressing satisfactorily.

Demand for power is increasing continuously in UP. It is expected to be 4,600 mw by the end of 1990. The State Government intends to raise power generation above the level of this demand by the end of 1990. Exploratory work is being done about possibilities of further expansion to meet any eventual demand in the future. This State is rich in rivers and there is vast scope for generation of at least 20,000 mw from hydel projects. At Singrauli also, there is scope for a thermal project capable of generating another 10,000 mw.

At present work is progressing speedily on 10 power projects of a total installed capacity of 3,082 mw. Some of these, namely, Parichha thermal project, Tanda thermal project and Unchhahar project, are expected to be completed during the current plan period. Besides, rapid progress is being made on five hydel projects—Tehri Dam (1,000 mw), Lakhwar Vyasi (300 mw), Yumuna (Stage-II) (Khodri) (120 mw), Maneri Bhali (90 mw) and Vishnuprayag (262 mw).

These go to show how alive the present government is to the need of regular and adequate supply of power for the progress of this State and well-being of its people. Presently we are passing through a critical stage but we are sure we will overcome the difficulties with the help and understanding of the people.

Power development programme in Uttar Pradesh

Manaribholi power house and dam under construction

POWER development in Uttar Pradesh has been far behind the national level of generation and consumption. The per capita consumption of power in UP was 86.57 units at the end of 1979-80 against all-India figures of 130.48 units. The achievements in the power sector in UP at the beginning of the Sixth Five Year Plan 1980-85 have been as follows :

(i) installed capacity (derated)	
(a) Thermal	2,202 MW
(b) Hydro	1,068 MW
	3,270 MW
(ii) Main transmission lines	
(a) 400 kV	762 Km
(b) 220 kV	3,210 Km
(c) 132 kV	7,476 Km
(iii) Rural electrification	
(a) Villages	38,577 Nos
(b) P.T.Ws.	3,44,135 Nos
(c) Harijan bastis	14,014 Nos

The demand for power continued to ncrease at a faster rate than the installed apacity in various years, with the result hat State had to face an acute power hortage year after year.

Demand for power

According to the indications of the Eleventh Annual Power Survey (XI APS), at present being conducted by Government of India, the peak and energy demands in UP are likely to be as follows :

Year	Peak demand (MW)	Energy requirement (Million units)
1981-82	3,400	17,586
1982-83	3,824	19,788
1983-84	4,234	21,810
1984-85	4,750	24,500
1989-90	8,600	44,000

Table I : Power generation in UP

Name of project	Total capacity (MW)	Likely benefit during 1980-85	Commissioning schedule
A — Hydro			
(i) Garhwal—Rishikesh—Chilla	4×36	144	1980-81*
(ii) Yamuna State-II (Khodri)	4×30	120	1982-83
(iii) Maneri Bhali-I	3×30	90	1983-84
B — Thermal			
(iv) Obra Extn. III	2×200	400	3/81*, 10/81
(v) Parichha	2×110	220	8/82, 2/83
(vi) Tanda	4×110	330	12/83, 6/84, 12/84
(vii) Anpara 'A'	3×210	630	6/83, 12/83, 6/84
Total ..		1,934 MW	
C — Central products			
(i) Singrauli super thermal station	5×200 2×500	600	(Balance 250 MW share after 31-3-85)
(ii) Narora atomic	2×235	100	(Balance after 31-3-85)
Total ..		700 MW	

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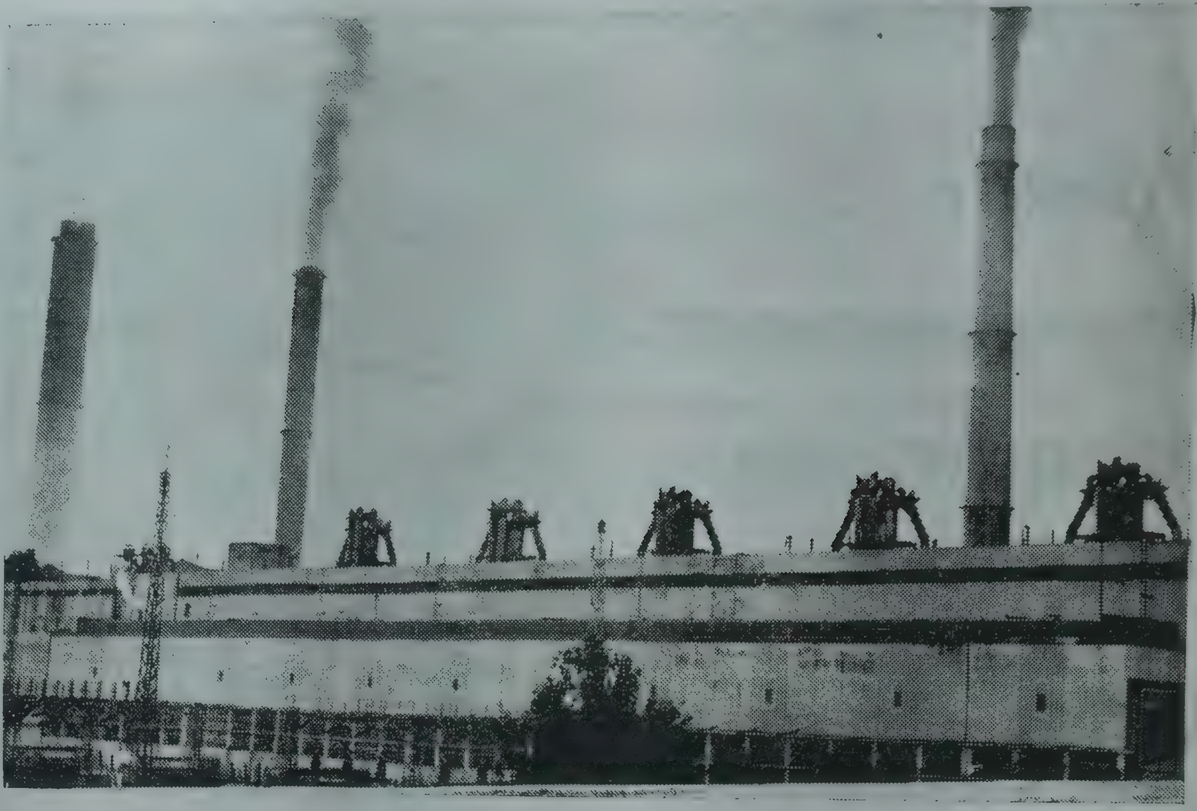
* Commissioned as per schedule.

In the above projections the average growth rate has been assumed as 13 per cent for industries, 16 per cent for irrigation and dewatering, 15 per cent for domestic and commercial and 8 per cent for railway traction.

Sixth Five Year Plan (1980-85)

The outlay in the power sector for UP for Sixth Plan 1980-85 has been estimated at Rs 2,153 crores, with major break-up as follows :

	(Rs in crores)
I. **Generation :**	
(i) On-going schemes	871.11
(ii) New schemes	418.55
	1,289.66
II. **Transmission and distribution**	640.00
III. **Rural electrification**	212.44
IV. **Survey and investigation** ..	10.90
Total ..	2,153.00



Obra thermal power station, Obra, Mirzapur

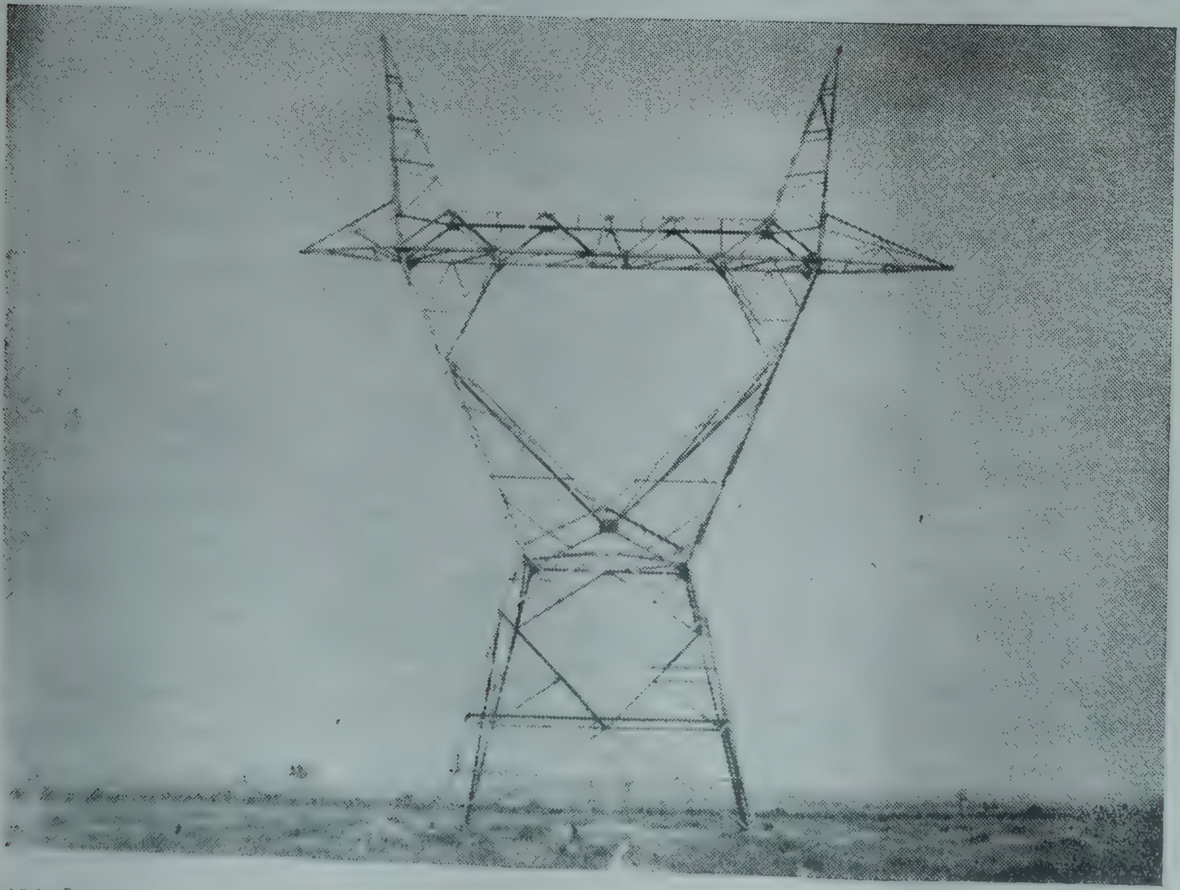
Generation programme

As stated at the beginning the total installed generating capacity (derated) in the State was 3,270 mw on April 1, 1980. An additional benefit of 1,934 mw is expected from the on-going projects and 700 mw from Central projects during 1980-85 plan (see Table 1).

Other generation projects which have been approved by the Planning Commission and are expected to yield benefits after the Sixth Plan 1980-85 (see Table 2).

Table 2 : Power projects to be commissioned after 1980-85

Name of project	Total capacity (MW)	Likely benefit during 1985-90	Commissioning schedule as per revised Plan
A — Hydro			
(i) Maneri Bhali-II	4×64	256	1987-88
(ii) Lakhwar Vyasi	420	420	1989-90
(iii) Vishnu Prayag	4×65.5	—	1990-91
(iv) Tehri Dam	4×250	—	1991-92
B — Thermal			
(v) Tanda	4×110	110-4th unit	1985-86
(vi) Unchahar	2×210	420	1984-86
C — Central projects			
(vii) Singrauli Super Thermal Station	5×200 +2×500	250	6th and 7th Plan periods.
(viii) Narora Atomic	2×235	100	
Total ..		1,556 MW	



400 kv transmission tower

After taking into account the benefits of the above projects, there will be shortage of about 3,250 mw in peak demand and 14,000 million units in energy requirement in UP by the end of Seventh Plan in March 1990.

New projects

To reduce the gap between demand and supply of power in UP during the Sixth and subsequent Five Year Plans, a number of new hydro and thermal schemes were proposed by the State and are under examination in the Government of India (see Table 3).

In order to cope up with the future demands of power in the State, investigation of new schemes, both hydro and thermal, has been taken up on a large

Table 3 : New hydro and thermal Projects under examination

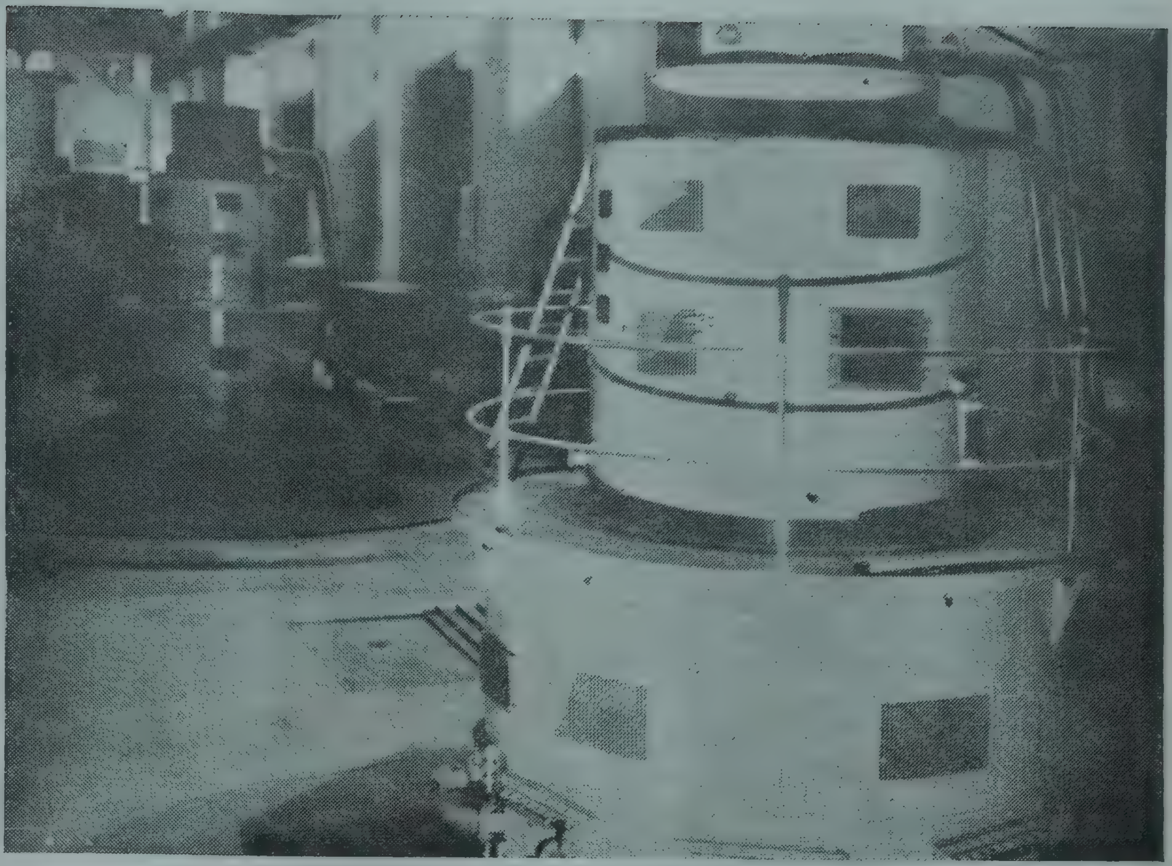
Name of project	Installed capacity (MW)	Estimated cost (Rs crores)
A Hydro		
Khara	3×27	60.74
Pala Maneri ..	3×47.5	125.16
Lohari Nag Pala ..	3×94	177.96
Srinagar*	3×56	100.00
Koteshwar Dam*..	4×45	108.00
Kishau Dam ..	4×150	229.92
B Thermal		
Anpara 'B' ..	2×500	472.09
Rosa	3×210	319.54
Jawaharpur ..	3×210	324.23
Dohrighat.. ..	2×210	229.15
Anpara 'C' ..	3×500	643.97
Parichha Extn. ..	2×210	212.10
Narora*	4×210	480.00

* Project report under finalisation.

scale. Details of investigation work are given below :

Hydro : In the report of the Working Group on Energy Policy issued in November 1979, it has been recommended that hydro-electric power development should receive a high priority. Therefore, several hydro-electric projects have been included for survey and investigation during the five year period 1980-85 (see Table 4).

Thermal : Schemes for thermal power proposed for investigation during the five year period 1980-85 are given in Table 5.



Chila power generators

Table 4 : Hydro power projects under investigation and survey

Name of scheme	Proposed capacity (MW)	Estimated cost (Rs crores)	Period of investigation
Yamuna Valley			
1. Katapathar	19	19.00	1980-82
2. Kuwa Damta	71	50.00	1980-85
3. Tuini Palasu	50	30.00	
4. Barkat Kuwa	50	30.00	
5. Paber Tons	120	70.00	1980-85
Ganga Valley			
6. Koteshwar Dam	180	108.00	1978-81
7. Srinagar	200	137.00	1980-82
8. Bowala Nand Prayag	130	75.00	1980-85
9. Utyasu Dam	900	500.00	
10. Tapovan Vishnugad	220	120.00	
11. Eishiganga	89	50.00	
12. Bhaironghati	900	500.00	
13. Kotli Bhel	1,040	600.00	
14. Bhuindar Ganga	20	15.00	
Sharda Valley			
15. Eastern Ramganga	80	64.00	1980-85
16. Dhauliganga..	900	500.00	
17. Goriganga	450	250.00	
Total ..	5,419 MW		

Table 5 : Thermal power projects under investigation

Name of scheme	Proposed capacity (MW)	Estimated cost (Rs crores)	Period of investigation
1. Narora	4×210	480.00	1980-81
2. Allahabad	5×210	600.00	
3. Ramganga	4×210	480.00	1981-82
4. Bijnor/Garh	5×210	600.00	
5. Gorakhpur	3×210	360.00	
6. Super Thermal at coal pithead near Singrauli ..	10×500	2,750.00	1980-85
Total ..	9.410 MW		

New facets of rural electrification

UTTAR Pradesh covers an area of 2,94,413 sq km with 325 towns and 1,12,561 inhabited census villages as per 1971 census. Out of a population of 88.34 million in UP as per 1971 census, 75.95 million or 85.97 per cent lives in villages. Rural electrification is an important aspect of rural development as it gives boost to cottage industries, irrigation, education, drinking water etc. Therefore, special importance is always assigned to rural electrification as it is closely interlinked with food production, besides giving more employment opportunities to the rural population which is the key factor in the socio-economic transformation in rural areas.

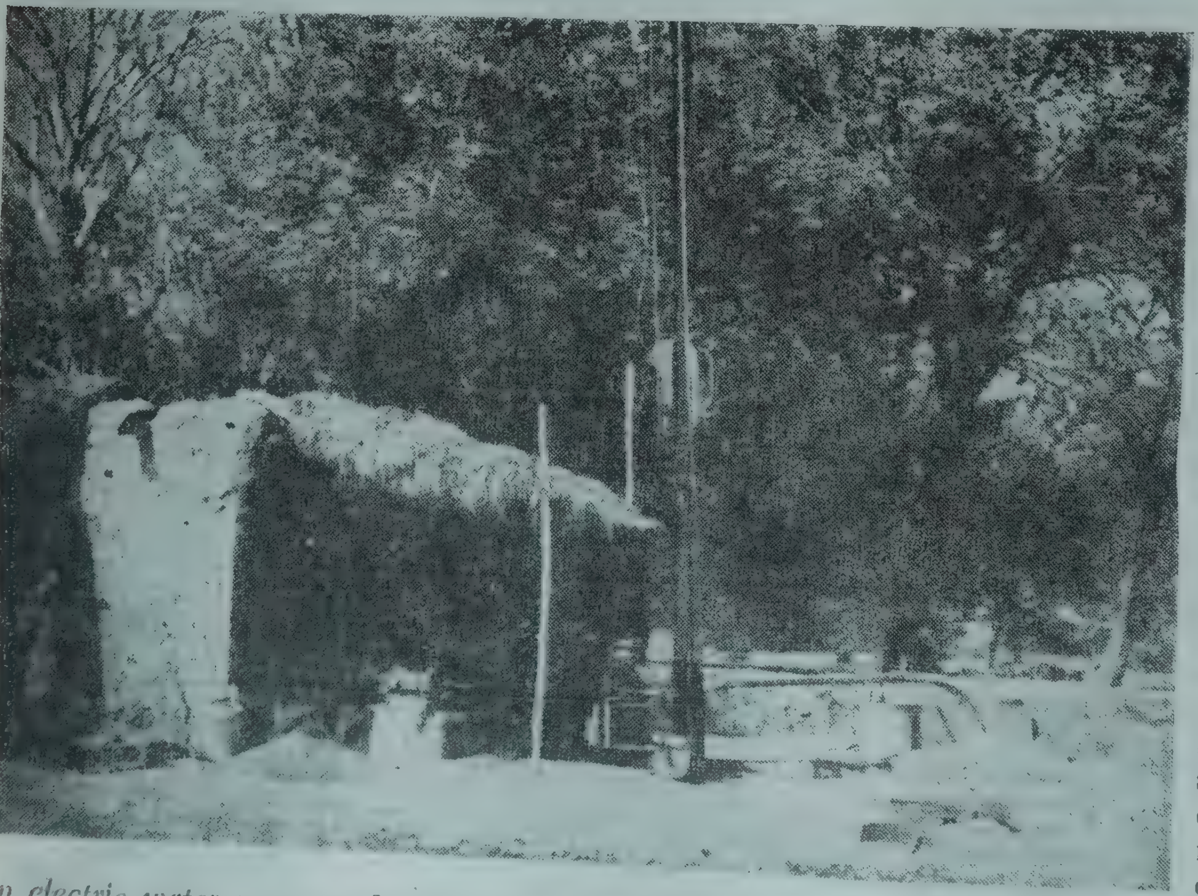
After independence the country adopted the path of planned overall development through five year plans in which rural electrification was one of the important components. However, the emphasis in this respect has been changing during the course of time to meet the requirements of economic development on which rests social development also. During the Three Five Year Plans (1951-56, 1956-61 and 1961-66) electricity was considered as a social amenity and, therefore, emphasis was laid simply on electrification of villages. The Third Plan had also laid special emphasis on the establishment of state-wise grid networks providing the basic framework for the development of a more comprehensive rural electrification programme for the development of rural industries with a view to creating additional employment opportunities.

However, drought conditions, which prevailed in the country for many years in the mid-sixties and the consequent chronic food shortages led to changes with emphasis shifting from rural electrification and development of rural industries to increasing the agricultural production through a programme of massive exploitation of ground water resources. An agricultural crash programme was launched by the UP Government in October 1965 under which private farmers were encouraged to bore tubewells/pump sets for assured irrigation and the State Electricity Board geared itself up for massive energisation of these PTW/PS besides state tubewells, the number of which was also substantially increased. Thus, while there were only 9,283 PTW/PS and 7,675 State tubewells energised till March 1966, 82,694 private tubewells/pump sets and 1,494 state tubewells were energised during 1966-70, thus laying the foundation for assured irrigation to the farmers which culminated in the green revolution in the State.

Table I: Progress of rural electrification in UP under the Plan

Sl. No.	At the end of	PTW/PS energised	Villages electrified	Harijan bastis electrified
1.	Pre-plan period	635	110	N.A.
2.	First Plan	1,429	420	N.A.
3.	Second Plan	3,566	1,082	N.A.
4.	Third Plan	9,283	5,855	N.A.
5.	Three annual plans (1966-69)	65.513	12,926	N.A.
6.	Fourth Plan	216,446	29,765	5,960
7.	Sixth Plan	307,990	36,298	12,453

N.A. = Not available.



An electric water pump and flour mill at work in a village in Rae Bareli

In 1969 on the occasion of Gandhi centenary celebrations, special importance was given to provision electricity for domestic and rural industrial purposes to the villages and particularly Harijans. Table I shows the progress of rural electrification at the end of various five-year plans.

UP is richly endowed with underground water resources with about 30 per cent of the ground water potential in the country. The soil is fertile and the general climatic conditions conducive to intensive agricultural production. The State, therefore, has a very large potential of tubewells and pump sets for exploitation of its ground water and agricultural potential. Since the bulk of the rural population is dependent on agriculture, the role of electricity in the villages has a special significance with respect to agricultural uses and it comprises mainly of irrigation by utilisation of ground water resources and the use of electricity for other allied agricultural purposes such as threshing, milling etc. The main plan of rural electrification in the State at present is, therefore, the energisation of irrigation tubewells and pump sets.

In the Sixth Plan the concept of Integrated Rural Development (IRD) has been introduced, the social uplift and wellbeing of the rural poor being its cardinal objective. Development of proper infrastructure for rural electrification has, therefore, become all the more important in achieving the objective of integrated rural development. Accordingly, priority has been given to rural electrification works in the State during the Sixth Plan period. Table 2 depicts the programme of rural electrification in the State during the Sixth Plan.

Rural electrification being a massive project involves a huge amount of investment. The rural electrification works are being executed by the State Electricity Board out of funds provided by the State Government, Rural Electrification Corporation Ltd (REC), Agricultural Refinance Development Corporation (ARDC) and other financial institutions. Briefly stated these are:

State Normal Programme: This programme is financed from the funds provided by the State Government.

REC (Normal) Schemes: These are area based schemes financed by REC Ltd, New Delhi. Normally these schemes are for comparatively less backward areas.

Revised Minimum Needs Programme (RMNP) Schemes: These are also area based schemes financed by REC. These schemes are for more backward areas.

Special Programme Agriculture (SPA) Schemes: In these schemes basically the electricity connections for irrigation tubewells/pump sets are provided in the virgin areas i.e. the areas which are not covered under REC/RMNP schemes. This scheme has been introduced recently by REC to give impetus to the programme of energisation of tubewells/pump sets and schemes are financed jointly by REC, ARDC and commercial banks.

Agricultural Re-finance Development Corporation (ARDC) Scheme: Under this scheme the State Electricity Board first energises private tubewells/pump sets through its own finances which are subsequently reimbursed as loan by ARDC.

Besides the above the State Electricity Board has also a 'Deposit Scheme' under which the consumer can deposit the entire amount involved in the energisation of his tubewell/pump set and

Continued on page x

Table 2 : Yearwise target of PTW/FS, villages ard Harijan bastis during Sixth Plan period 1980-85

Year	PTW/PS	Villages	HB
1980-81	50,000	5,100	2,735
1981-82	41,270	4,000	2,200
1982-83	53,900	5,200	2,800
1983-84	63,300	6,400	3,535
1984-85	69,400	7,350	4,180
Total	2,77,870	28,050	15,450

Table 3 : Scheme-wise financial outlay and targets for rural electrification works during Sixth Plan (Physical targets)

(Nos.)

Programme	1980-81	1981-82	1982-83	1983-84	1984-85	1980-85
1. **Energisation of PTW/pumpset:**						
(a) Under plan outlay:						
(i) SNP	16,200	8,710	15,450	19,500	20,900	80,760
(ii) REC	8,200	7,550	8,350	8,590	8,720	41,410
(iii) RMNP	4,100	5,940	9,170	11,870	14,140	45,220
Sub-total (A)	28,500	22,200	32,970	39,960	43,760	1,67,390
(b) Under additive resources:						
(i) ARDC	9,180	9,820	10,400	11,090	12,360	52,850
(ii) SPA	10,620	7,730	9,010	10,730	11760	49,850
(iii) Deposit	1,700	1,520	1,520	1,520	1,520	7,780
Sub-total (B)	21,500	19,070	20,930	23,340	25,640	1,10,480
Total (A+B)	50,000	41,270	53,900	63,300	69,400	2,77,870
2. **Electrification of villages:** (As per CEA—definition)						
(a) Under plan outlay:						
(i) SNP	1,150	728	1,550	2,120	2,360	7,408
(ii) REC	1,140	1,000	1,000	1,050	1,050	5,240
(iii) RMNP	1,350	932	1,200	1,600	2,130	7,212
Sub-total (A)	3,640	2,600	3,750	4,770	5,540	20,360
(b) Under additive resources:						
(i) ARDC	640	750	780	830	930	3,930
(ii) SPA	700	590	670	800	880	3,640
(iii) Deposit	120	—	—	—	—	120
Sub-total (B)	1,460	1,340	1,450	1,630	1,810	7,540
Total (A+B)	5,100	4,000	5,200	6,400	7,350	28,050
3. **Electrification of Harijan bastis:**						
(i) SNP	245	268	600	885	1,000	2,998
(ii) REC	1,140	1,000	1,000	1,050	1,050	5,240
(iii) RMNP	1,350	932	1,200	1,600	2,130	7,212
Total	2,735	2,200	2,800	3,535	4,180	15,450
4. **Electrification of villages (by laying LT main):**						
(i) SNP	240	68	400	685	800	2,193
(ii) REC	1,140	1,000	1,000	1,050	1,050	5,240
(iii) RMNP	1,350	932	1,200	1,600	2,130	7,212
Total	2,730	2,000	2,600	3,335	3,980	14,645
Financial Outlay (Rs. crores)						
(a) **Under plan outlay:**						
(i) SNP	10.90	6.38	12.50	16.50	18.00	64.28
(ii) REC	10.54	11.62	12.00	12.50	12.71	59.37
(iii) RMNP	10.56	12.00	17.00	22.00	27.23	88.79
Sub-total (A)	32.00	30.00	41.50	51.00	57.94	212.44
(b) **Under additive resources:**						
(i) ARDC	5.50	6.48	6.87	7.32	8.16	34.33
(ii) SPA	6.67	7.34	8.58	10.20	11.18	43.97
(iii) Deposit	1.00	1.00	1.00	1.00	1.00	5.00
Sub-total (B)	13.17	14.82	16.45	18.52	20.34	831.30
Total (A+B)	45.17	44.82	57.95	69.52	78.28	295.74

Tehri Dam Project

THE principal tributaries of the river Ganga, namely the Bhagirathi and Alaknanda, flow together at Deoprayag, about 66 km upstream of the town of Rishikesh, to form the Ganga. The river traverses down through a deep gorge with steep bed slopes and a number of cascades.

To meet the growing power needs of Uttar Pradesh and to harness the available irrigation potential of river Ganga, implementation of the Tehri Dam project, has been undertaken. This will help the State to overcome power shortage to some extent as well as generate fresh irrigation potential which is essential for improving the economy of the State.

The Tehri Dam Project would be a multi-purpose development project, comprising the construction of a 260.5 metre (above foundation level) rockfill dam across the Bhagirathi, 1.5 km below the confluence of Bhilangana river with it. The project envisages installation of 1,000 mw in Stage I in an underground power house located on the left bank. Provision for increasing the installed capacity to 2,000 mw ultimately has been made in the overall planning. The annual energy generation in the initial stage has been estimated at 2,910 million kwh on 90 per cent availability basis and 3,567 million kwh on the average availability basis. The project would also afford irrigation benefits of an additional 0.27 million hectares of land

The power evacuation will be through 400 kv double circuit line to the nearest grid substation at Rishikesh. Power for construction work will be supplied by the existing 66 kv system.

The project is located in the Tehri Garhwal district of Uttar Pradesh. The most important city nearest to the project is Rishikesh which is also a broad gauge rail head situated about 82 km south of the project area and is connected by a hilly road.

Project features

The project involves the construction of various structures as follows.

(i) Four 11 metre diameter diversion tunnels, two on either flank of the dam (two of them on left bank to be used as tail race tunnel).

(ii) A 260.5 metre high (above deepest foundation) earth and rockfill dam across the river Bhagirathi.

(iii) A chute spillway with a capacity of 11,000 cum/sec having five bays of 16 metre width and 12.15 cum high radial gates.

(iv) Two intake structures with vertical and submerged cylindrical tower, situated just over left bank diversion tunnels.

(v) Main penstocks, 5.73 m. internal diameter and steel lined. Each penstock will feed one 250 mw machine.

(vi) A 22.5 metre wide, 135 metre long main power house underground cavity on the downstream side of dam on the left bank, about 300 metre below the ground surface.

(vii) The generating plant consisting of four Francis vertical shaft turbines with an output corresponding to 250 mw output of the generator.

(viii) A 400 kv switchyard with adequate number of feeder bays etc. Table 1 gives salient features of the project.

Estimate of cost

The total cost of the project based on prices in 1980 is estimated to Rs 827.30 crores. This covers cost of land, dam, spillways tunnel, power house having installed capacity of 1000 mw, 400 kv switchyard etc including necessary infrastructure.

As per current programme, the project is likely to be completed by the end of the year 1991-92.

A total of 2,910 million units are expected to be generated annually at a cost of generation of 17.69 p/unit. Financial rate of return works out to 9.4 per cent.

Project implementation

The design, procurement, construction of civil works will be carried out by the UP Irrigation Department which has established the necessary infrastructure. The design, procurement, erection and commissioning of electrical equipment will be carried out by Hydro Electric Project Organisation of UPSEB.

A broadbased management organisation headed by a General Manager of Chief Engineer's rank already exists to administer and construct the Tehri Dam Project. The team will be further strengthened.

At present, the work of building of roads, colonies etc, excavation of diversion tunnels and stripping treatment for the dam site are in progress.

Table I : Salient features of Tehri Dam Project

1. Location :	On river Bhagirathi, about 1.5 Km. downstream of the confluence of rivers Bhagirathi and Bhillangana in district Tehri, Uttar Pradesh.
2. Reservoir :	
(a) Full supply level (Normal maximum reservoir level)	830 m.
(b) Dead storage	740 m.
(c) Live storage	2615×10^6 m^3
3. Dam :	
(a) Type	Rock fill
(b) Height of dam (above river bed)	245.5 m.
4. Power House :	
(a) Location	Left bank, underground
(b) Head	188 m.
(c) Turbine	4 Nos. Francis, vertical shaft
(d) Generators	4 Nos. 250 MW, 16 kV
5. Switch Yard :	
(a) Location	Left bank-surface
(b) H.T. cable	400 kV feeders
6. Firm Power :	201 MW
7. Installed Capacity :	1000 MW
8. Cost :	
(a) Total	Rs. 827.30 crores
(b) Share of Irrigation	Rs. 346.00 crores
(c) Share of Power	Rs. 481.30 crores
9. Benefits :	
(a) Power	2910×10^6 Kwh
(b) Additional annual irrigation	2.70 lakh hectare.

Anpara 'A' thermal power project

Anpara power station under construction

THE Anpara thermal power station, is located in district Mirzapur of Uttar Pradesh on the left bank of Rihand reservoir, in the vicinity of Singrauli Coalfields. It has an installed capacity of 3 x 210 mw.

Anpara is one of the most ideal sites for locating a large size thermal power station, as all the following basic parameters excepting nearness to load, are available at this place:

(a) Availability of coal with minimum distance of transport.

(b) Sufficient cooling water round the year.

(c) Availability of land.

(d) Far away from thickly populated area from considerations of pollution.

Moreover, the project site has the advantage of having National Highway No. 51 Singrauli-Pipri Road, passing nearby. Indian Railways are also constructing a loop line for different collieries being developed in the area and connecting the same with main Chopan-Singrauli-Katni line. The above railway line, which is expected to be ready up to Bina coalfields by middle of 1981 will pass very near to the proposed Anpara site.

Presently three units of 210 mw are being installed. Land has been acquired, and lay-out planned in such a manner that common facilities like cooling water system, coal and ash-handling, marshalling yard and other common auxiliaries as also ancillary buildings could easily be augmented to cope with ultimate capacity of 3,130 mw by the installation of additional 5 units of 500 mw each in two stages.

Project report for installation of 3x210 mw Anpara 'A' thermal power project was submitted to the Government of India in July 1977. The Planning Commission accorded its approval to the project amounting to Rs 227.19 crores, in January 1979. Since then, the cost estimate of the project has been revised in view of cost escalations, and the revised cost of the project is Rs 344.83 crores.

The salient features of the project are as follows:

I. **Location:**

1. Near village Anpara on the left bank of Rihand reservoir near Renusagar Thermal Power Station.
2. Situated at a distance of 30 km. from Rihand dam on Pipri-Singrauli road.
3. 5 km from Kakri and 10 km. from Khadia Blocks of Singrauli Coal Fields.
4. 15 km from Singrauli Rly. Station on Billi-Katni line and 5 km. from Kakri Rly. Station on proposed Karela road-Jayant Rly. line (Eastern Rly).

II. **General:**

1.	Land	500 hectares
2.	Coal	2 million tonnes per year
3.	Ash	0.6 million tonnes per year
4.	Water	1000 cusecs
5.	Manpower	1500

III. **Technical:**

1.	Installed capacity of proposed power station	630 MW
2.	Boilers	3 Nos. of radiant, dry-bottom, natural circulation, vertical water tube type CE design boiler with single reheat 680 tonnes/hr. of steam at 158 Kg/cm^2 pressure and 540°C temperature.
3.	Turbine and turbo-generators	3 Nos. of 210 mw of kwu West Germany design, condensing type, tendem compound, three cylinders with 150 ata & 535°C inlet steam condition.
4.	Cooling system	Once through cooling system. From Rihand Reservoir 36°C (Maximum design temp.)
5.	Water treatment plant	4x75 tonnes/hour capacity.
6.	**Outdoor switchyard:**	
6.1	Power transformers	3 Nos. 250 MVA, 15.75/400 kV.
6.2	Interconnecting transformers	2 Nos. 100 MVA, 400/132 kV.
6.3	Outgoing feeder 400 kV	Single circuit to Azamgarh Single circuit to Obra TPS Single circuit to Singrauli STPS.
	132 kV	Double circuit to Rihand P/H. Double circuit to Amarkantak (MP).

IV—Financial: The latest estimated cost of the project is Rs 344.83 crores. Annual generation will be 3067.5 million units at a cost of generation of 26.70 paise/unit.

V—Project schedule : The first unit at this project is expected to be commissioned in June 1983 and the remaining units at intervals of 6 months thereafter.

VI—Funding of the project: Anpara 'A' power project was proposed by the Government of India to Kuwait Fund for Arab Economic Development for financing. An agreement has been finalised between the Government of India and Kuwait Fund for financing part cost of this project. The loan agreement has been executed in two parts as follows:

(i) For KD 16,000,000 (equivalent to Rs 52 crores at the present exchange rates) for financing 26 per cent of total expenditure towards the cost of steam turbogenerators, boilers and all auxiliary plant and equipment.

(ii) For KD 9,000,000 (equivalent to Rs 29 crores at the present rate of exchange) for financing the following items on coal transportation and handling system:

(a) 100 per cent cost of construction of railway loop for coal transport (KD 3,700.000).

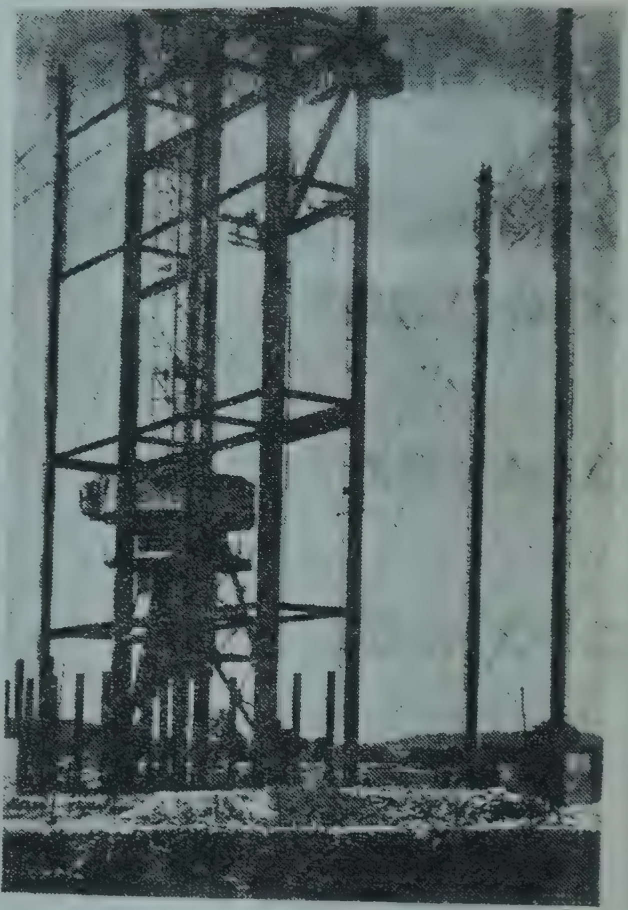
(b) 100 per cent cost of locomotives and wagons (KD 2,400,000).

(c) 21 per cent of the expenditure towards supply and erection of coal and ash-handling equipment (KD 2,200,000).

(d) Contingencies (KD 700,000).

First part of the agreement was signed in the second week of May 1981 in Kuwait during the visit of Hon'ble Prime Minister of India. The second part of the agreement is expected to be signed in September/October 1981.

The part financing of the Anpara project under Kuwait Fund will ease the cash flow on the project, and it is hoped that this will lead to completion of the project on time.



Another section of Anpara power station under construction

New facets of rural electrification

Concluded from page vii

the portion of the amount which, normally, is to be borne by the board is returned to the consumer alongwith interest on it after five years.

Table 3 appearing on page vii, gives schemewise financial outlays and targets of various rural electrification works during Sixth Plan.

The UP State Electricity Board is well aware of its responsibilities to achieve the object of integrated rural development and the basic concept of the Sixth Plan, and is making all-out efforts to extend electricity to far-flung remote areas of the State. Rural electrification from the viewpoint of investment by the board is a losing proposition. However, inspite of incurring heavy losses in rural electrification works, the board is not shirking its social responsibility in the upliftment of rural folk.

A Harijan basti in a village with electric lights

Power incentives to entrepreneurs

ELECTRICITY is universally accepted as a powerful tool for increasing productivity. It essentially serves as a basic input for the growth of industries. In order to encourage entrepreneurs for setting up industries in the State, the UP State Electricity Board has initiated various steps for expeditious load sanction and concessions in tariff. These are enumerated as below:

Application for power loads and their sanctions

(a) The application forms for sanction of loads are available free of cost in the offices of the Executive Engineer, sub-divisional officers and block development officers. The prospective consumers are required to submit application forms duly filled in along with the earnest money of Rs 25.00 (adjustable in service connection charges) in the office of concerned executive engineer. The application form should either be in the name of owner of the premises or legal tenant.

(b) The industrial loads up to 25 bhp are sanctioned by the committee comprising the following at the district level:—

(i) District Magistrate—chairman.

(ii) Additional District Magistrate (Planning)/District Planning Officer—member.

(iii) District Industries Officer—member.

(iv) Executive Engineer (Distribution) Member—Secretary.

The loads of powerlooms up to 5 bhp are sanctioned by the executive engineer concerned of the Board.

(c) The new and additional industrial loads above 25 bhp and up to 100 bhp are sanctioned by the regional committees with each committee comprising the following members subject to the condition that the total load after sanction of the additional load should not exceed 100 bhp in any case:

1. Regional Manager, U.P. Financial Corporation—Convener.

2. Chief Zonal Engineer, UPSEB/G.M. KESA, Kanpur or his nominee not below the rank of Superintending Engineer of that Region—Member.

3. Dy. Development Commissioner—Member.

4. Joint Director (Industries)—Member.

(d) The loads above 100 bhp are sanctioned by the State Government according to the policy laid down in this regard.

The industrial consumers are required to obtain necessary certificates for the current year from Cane Commissioner for operating cane crushers, from district/municipal medical officer of health for manufacture of ice candy/ ice cream and from regional foods controller for operation of rice hullers.

Terms and conditions for electric connections

(a) After the load is sanctioned the terms and conditions along with the intimation about the amount of service line charges and security, are sent to the consumer for execution of the agreement.

(b) Where the distribution mains are already laid, for each new connection the Board constructs 30 metres (100 feet) service line on public land free of cost. For excess length of the line the prospective consumer has to deposit the cost of such line in advance, which is constructed by the Board. The estimated cost of service line is to be deposited by the prospective consumer in advance which is adjusted subsequently according to actual expenditures.

Where the distribution mains are not laid the entire cost of construction of 11 kv/0.4 kv line is to be deposited by the prospective consumer in advance.

(c) The service line charges for power loads up to 20 kw have been standardised. The service line charges for loads above 20 kw are payable as per estimated costs. The cost of transformers is borne by the Board.

(d) The facility of having independent feeder from 33 kv sub-station is admissible to large and heavy power consumers at the discretion of concerned Chief Zonal Engineer. Such consumers are required to pay in advance the cost of switchgear to be installed at the start of the feeder and the cost of line from the sub-station to his premises. The connections to arc furnaces are not given below 33,000 volts.

(e) Security

The prospective consumers are rerequired to deposit the security at the following rates before the execution of the agreement. The security is accepted in cash only and an interest @ 3 per cent per annum is allowed at the close of the financial year through the electricity consumption bill (s):

Particulars	Rate of security deposits
(i) Small and medium power consumers having loads up to 10 bhp	Rs. 45.00 per bhp
(ii) Large power consumers having loads above 75 KW (100 bhp) and up to 200 KW (235 KVA)	Rs. 75.00 per Kw
(iii) Heavy power consumers having loads above 235 kVA	Rs. 90.00 per kVA

The small and medium power consumers are required to deposit the amount of security in full before the execution of agreement. The large and heavy power consumers have been given facility to deposit the 50 per cent amount of security before the execution of the agreement. The balance 50 per cent security is realised in four annual equal instalments in respect of consumers executing the agreement for five years and after one year from the consumers executing agreement for two years.

(f) The small and medium power consumers (up to 100 bhp) are required to submit the declaration on standard form for a period of two years after depositing the estimated cost of giving connection and the security deposits. The large and heavy power consumers are required to execute the agreement for a period of two/five years on the standard form. The declaration is to be submitted or the agreement is to be executed on a non judicial stamp paper worth Rs 5.00 whereupon a revenue stamp of twenty paise is also to be affixed.

After the submission of the declaration or execution of agreement by the prospective consumers the work of construction of lines and sub-station is taken in hand.

Inspection of installations and release of connections

The prospective consumers are required to deposit the inspection fee at the prescribed rates in the treasury and thereafter submit a copy of the treasury challan and the necessary B & L form before the connection is released. The installation of the consumer is inspected and checked and if it is found that the installation fulfils the requirement of Indian Electricity Rules 1956 then only the supply is released.

Concessions in tariff

The following concessions are admissible to the power consumers in the tariff:

(a) All the new industrial units connected on or after August 1, 1980 are exempted from the payment of minimum consumption guarantee for a period of one year from the date of commencement of supply. This facility is also admissible to the existing connections who had not completed one year on August 1, 1980 from the date of commencement of supply, for the unexpired period of one year.

(b) In respect of new connections as may be located in any of the eight hill districts in Uttar Pradesh but excluding those existing at a height of less than 2,000 feet above MSL (mean sea level) in Dehradun and Nainital districts, a development rebate of 33 1/3 per cent is admissible to a new industrial unit for a period of five years from the date of commencement of supply. This rebate is also admissible for the unexpired period of five years to those existing industrial units which had not completed five years on August 1, 1980 from the date of commencement of supply. This rebate is not admissible on the amount of minimum consumption guarantee.

(c) In respect of connections as may be located in Bundelkhand region comprising Jhansi, Lalitpur, Hamirpur, Jalaun and Banda districts, a development rebate of 50 per cent is admissible to a new industrial/agro-industrial unit connected on or after August 1, 1980, for a period of five years from the date of commencement of supply. This rebate is also admissible for the unexpired period of five years to those existing industrial/agro-industrial units of the above districts or Bundelkhand region who had not completed five years on August 1, 1980 from the date of commencement of supply. This development rebate is not admissible on the amount of minimum consumption guarantee and is also not allowed to the State tube-wells, pumped canals, lift irrigation schemes, drinking water supply schemes, railways and departments/corporations/undertakings of the State and Central Governments and local bodies.

(d) In respect of connections as may be located in districts other than those comprising Bundelkhand region and hill areas mentioned above, a development rebate of 10 per cent is admissible to a new large and heavy industrial unit for a period of three years from the date of commencement of supply. The rebate is also admissible for the unexpired period of three years to those existing industrial units in the above areas which have not completed three years on August 1, 1980 from the date of commencement of supply. The rebate is however, not admissible on the amount of minimum consumption guarantee.

(e) During the first year of the supply the new industrial units connected on or after August 1, 1980 are liable to pay for the actual maximum demand only. This facility is also admissible to the existing industrial units for the unexpired period of one year who have not completed one year on August 1, 1980 from the date of commencement of supply.

Exemption from power cut

The new industrial units connected on or after August 27, 1980 are exempted from demand cut for a period of five years from the date of commencement of supply. This facility is also admissible to those industrial units for the unexpired period of five years, who have not completed five years on August 27, 1980 from the date of commencement of supply.

Expeditious sanction of connections to new entrepreneurs

The UP Government has formed a "High Power Committee" to look into and redress the problems being faced by entrepreneurs in installation of new large, medium and small scale industries in the State. As per the decision of the committee a "Udyog Bandhu" Cell has been established in PICUP which works as the Secretariat to the High Power committee.

The UP State Electricity Board has joined hands with UPSIDC, UPFC, Directorate of Industries and PICUP to redress the various problems of entrepreneurs. Spot sanction is provided to new industrial loads under this programme and the problems regarding the release of new connections are resolved.

Incentives to farmers

THE economy of Uttar Pradesh is basically dependent on agricultural production. The agricultural production in turn depends on assured irrigation in which the energisation of private tubewells/pump sets plays a major role. The UP State Electricity Board is, therefore, making all-out efforts for maximum energisation of private tubewells/pump sets. Many incentives are provided to the farmers for availing of the facility of electricity. These are enumerated below:

Free cost concessions: The following free cost concessions are applicable to individual private tubewell/pump set connections for irrigation purpose only:

(a) (i) Cost of construction of 11 kv and LT line @ 60 metres per HP subject to a maximum of 300 metres per connection, and (ii) for five districts of Bundelkhand *viz* Jhansi, Lalitpur, Jalaun, Hamirpur and Banda, the above free limit is @ 80 metres per HP subject to a maximum of 400 metres per connection.

(b) Full cost of setting requisite distribution transformer sub-station.

Energisation of PTW/PS in clusters: For energisation of PTW/PS under clusters, the board bears the cost of line and substation up to the maximum extent of Rs 1,200 per BHP. In case expenditure involved is beyond the above limit, the amount is paid by prospective consumers in the ratio of their contracted load. Small and marginal farmers can make a cluster of four or five connections and can take the electric connections at these concessional rates.

Incentives to small and marginal farmers: A 15 per cent quota out of the yearly private tubewells/pump sets targets fixed under the State's normal programme is reserved for small and marginal farmers. A time bound programme has been framed for the release of connections to small and marginal farmers.

Flat rate tariff to PTW/pumpset consumers: A flat rate tariff of Rs 12/BHP/year is charged from PTW/PS consumers which works out to 12.97 paise/unit at 17 per cent load factor. These rates are quite low as compared to the cost of generation and except for one or two States, the rates are perhaps the lowest in the country.

Extra processes: With their private tubewells/pumping sets the consumers are allowed to operate chaff cutter, thresher, rice huller and cane crusher without paying any extra charge.

In respect of new connections as may be located in any of the eight hill districts in UP (Almora, Chamoli, Pauri-Garhwal, Pithoragarh, Tehri Garhwal, Uttarkashi, Dehra Dun and Nainital) but excluding those existing at a height of less than 2,000 feet above MSL in Dehra Dun and Nainital districts, a development rebate of 50 per cent on the amount of bill is given for a period of five years from the date of commencement of supply. This rebate is also admissible for the unexpired period of five years to those existing

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Power development in UP hills

By K. L. MUKHERJEE

Power supply to Chamoli district in the UP hills

THE hill region of Uttar Pradesh represents a special case of economic backwardness. The abundant resources of the region have not yet been exploited to the desired level. The economy of the region, comprising the districts of Uttarkashi, Chamoli, Tehri-Garhwal, Pauri-Garhwal, Almora, Pithoragarh and some parts of Dehra Dun and Naini Tal districts is predominantly agrarian as about 75.3 per cent of the total workers are engaged in agriculture. Forests occupy about 67 per cent of the total geographical area of 51,122 sq km, out of which 41 per cent are well-stocked forests.

The factors inhibiting the pace of development of the hill region, among others, are its peculiar geographical conditions, the nature of the terrain, settlement pattern, inadequate essential infrastructural facilities of power, roads and irrigation, besides relatively high construction and transport cost, longer gestation period of programmes/projects and lack of diversification and institutional support. In terms of per unit capital cost, extension services/infrastructural facilities, the same level of investment produces half or even lesser facilities than in the plains.

Past neglect and backlog in respect of socio-economic development has resulted in sizable variation in the levels of development as compared to that of the State and other hill areas, particularly of Himachal Pradesh.

Pockets of tribal concentration in UP's hills are relatively more depressed and need more attention in providing essential infrastructural facilities as also basic social inputs.

Some indicators of disparities in percentage deviation from the State average are given in Table 1.

Table 1 : Indicators of disparities in percentage deviation from average in UP

Area	Value of agricultural produce per net hectare area sown		Intensity of cropping		Percentage of net irrigated area per hectare to net area sown		Per capita net output from commodity producing sectors		Per capita gross industrial produce		Per capita consumption of electricity		Growth rate (Per cent) of agriculture sector	
	1968-69	1975-76	1968-69	1977-78	1968-69	1975-76	1968-79	1975-76	1968-69	1975-76	1968-69	1976-77	1968-69 over 1960-61	1975-76 over 1968-69
1	2		3		4		5		6		7		8	
Hill	+10.99	+31.43	—4.42	+19.08	—55.79	—50.33	+24.79	+41.59	—31.81	—22.61	—11.32	—81.30	1.3	4.7
State average ..	1,402.01 (In Rs)	2,415.68 (In Rs)	133.25 (%)	134 07 (%)	38.0	46.1	154.23 (In Rs)	175.76 (In Rs)	79.78 (In Rs)	209.67 (In Rs)	53.00 (In kw)	79.69 (In kw)	1.0	2.5

SOURCE: Draft Sixth Five-Year Plan (1980-85)

Power is the most important infrastructure for economic and social development. Due to paucity of coal and fuel wood power has added importance for fuel energy.

Power development in the hill region has been lagging behind on account of long distance T & D lines, non-viable micro-generation schemes and difficult terrain of the area.

At the end of the Fourth Plan, the total installed capacity of micro-generation in the State was 4,992.4 kw. By the end of March 1980 this had gone up to 13.713.4 kw, inclusive of 7,450 kw installed capacity added to the State sector by taking over private electricity companies. The details of the break-up of capacity are given in Table 2.

The main objective of power development in the hill areas during the Sixth Plan (1980-85) is to accelerate the power development programme, specially rural electrification and maximum utilisation of hydel potential for micro generation schemes. Emphasis will be on speedy extension of T & D lines. Special measures aimed at reducing the cost of micro generation of power will be taken.

The progress during 1979-80 and proposed financial targets for power deve-

Table 2: Installed capacity

District	March 31, 1980				Total (Kw)	January 31, 1981				Total (Kw)
	Micro-hydel		Diesel			Micro-hydel		Diesel		
Uttar Kashi ..	1.060	(6)	55	(2)	1.115	1.060	(6)	55	(2)	1.115
Chamoli ..	1.365	(7)	381	(3)	1.746	1.365	(7)	381	(3)	1.746
Tehri-Garhwal	200	(1)	320	(1)	520	200	(1)	320	(10)	520
Pauri-Garhwal	330	(3)	821	(2)	1.151	330	(3)	821	(2)	1.151
Almora ..	91.4	(2)	50	(1)	141.4	91.4	(2)	50	(1)	141.4
Pithoragarh	400	(2)	1·190	(5)	1.590	400	(2)	1.215	(5)	1.615
Dehra Dun ..	—		6,300	(1)*	6,300	3,000	(1)*	3·300	(1)*	6,300
Naini Tal ..	—		1,150	(1)*	1,150	1,150	(1)*	—		1,150
Total ..	3,446.4	(21)	10,267	(16)	13,713.4	7,596	(23)	6,142	(15)	13,738.4

Note: Figures in brackets show number of micro power stations.
(*) Private electricity companies taken over during 1975-76.

Table 3: Power generation in 1979-80 and financial targets for Sixth Plan

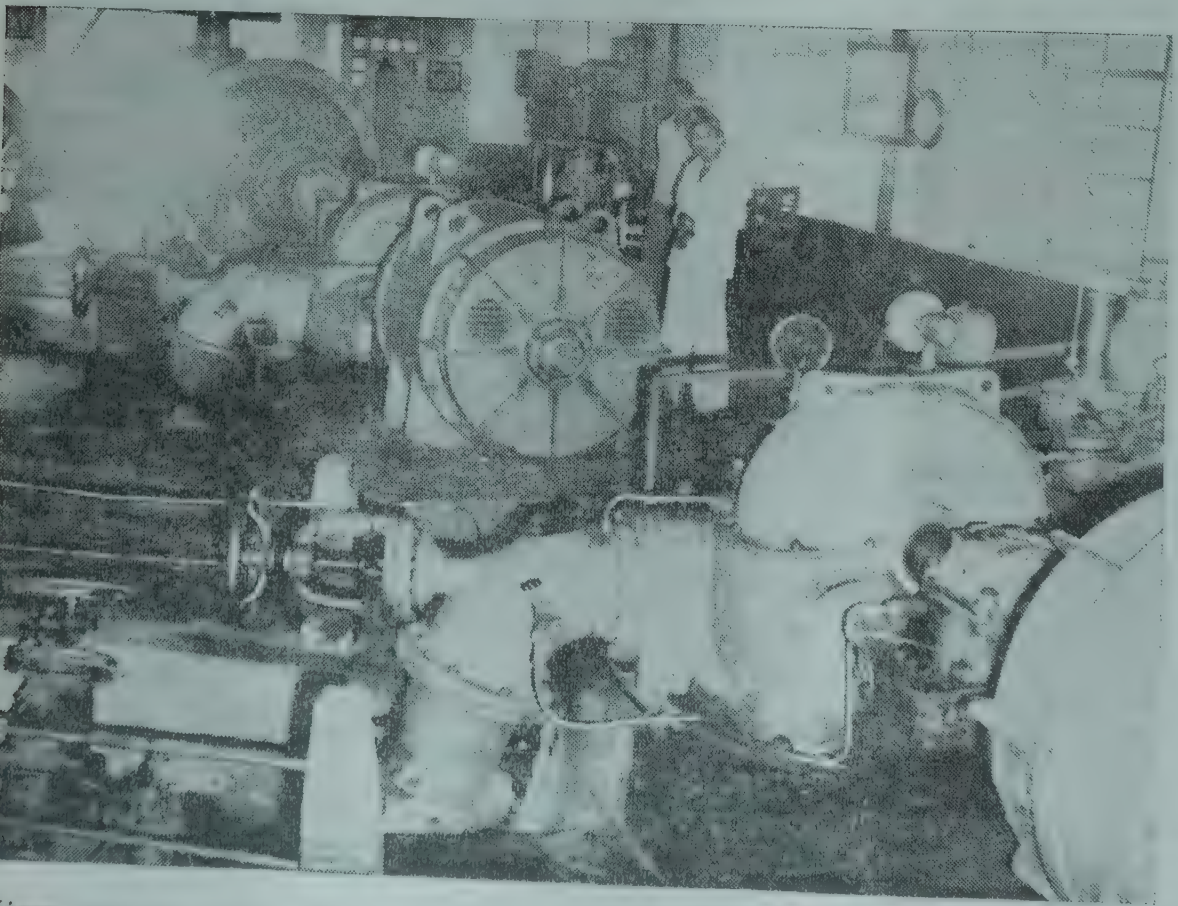
(In lakh rupees)

Programme	1979-80 Expenditure	1980-81 Outlay	Sixth Plan 1980-85 proposed outlay
Micro generation	24.17	25	500
T & D works (33 Kv and below)	155.50	175	2,000
Rural electrification :			
State normal	53.14	65	892
REC (i) Normal	92.41	120	732
(ii) MNP	9.78	325	3,376
Total (Power)	425.00	710	7,500

Table 4: Physical achievements and additional targets for power generation in Sixth Plan

Item	Unit	1979-80 Level	1980-81 Target	Sixth Plan 1980-85 target
Micro generation installed capacity	Kw	13,738.4	300	1,800
Transmission and Distribution				
(i) Construction of 33 Kv lines	Ckt (Km)	617.01	144	1,086
(ii) Construction of 33/11 Kv Sub-stantions..	Nos.	24	5	38
Electrification of villages	Nos.	3,610	587	7,344
Electrification of Harijan Basties	Nos.	1,492	587	7,344
Energisation of PTW/pumpsets	Nos.	3,241	270	2,000

SOURCE: Dnft Sixth Plan (1980-85).



Micro power station at Rudraprayag in Pauri Garhwal district

Incentives to farmers

Concluded from page xii

connections which have not completed five years on August 1, 1980 from the date of commencement of supply.

The following table gives the yearly achievement of energisation of private tubewells/pump sets in the State during the past decade:

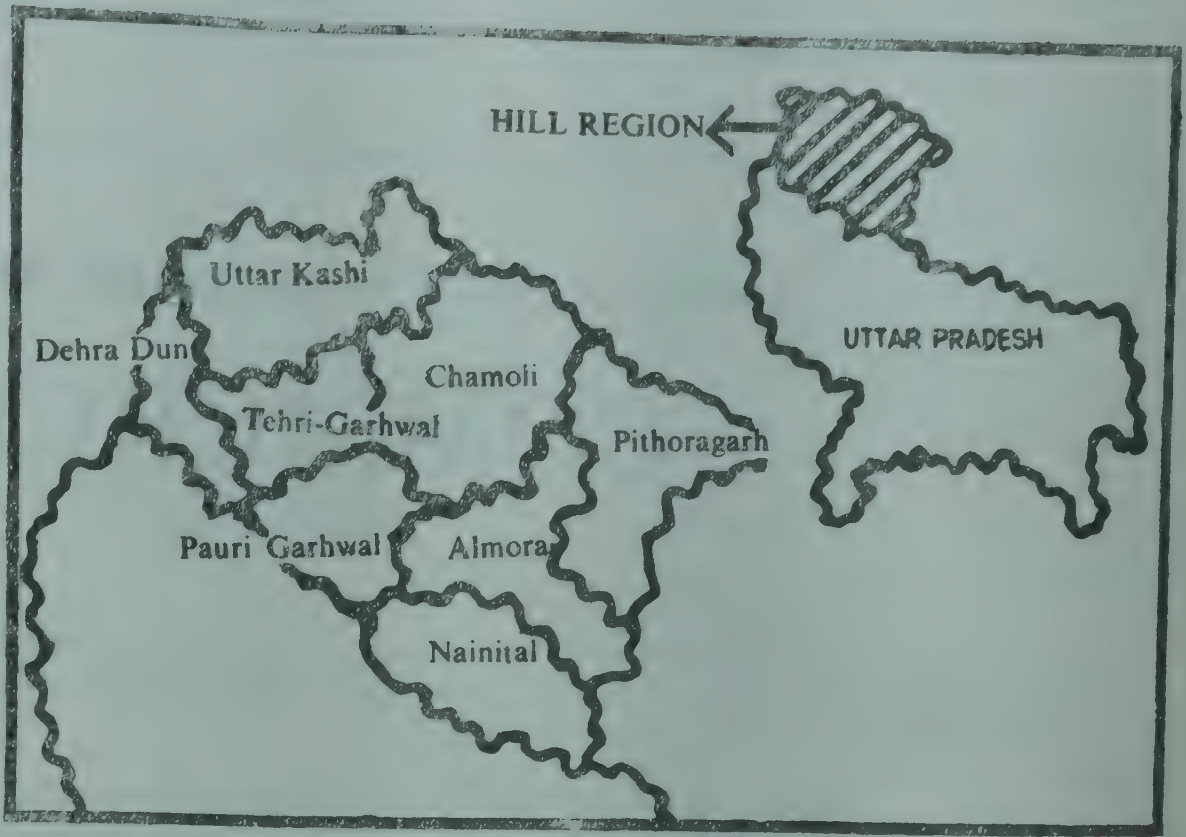
1971-72	30,665
1972-73	36,001
1973-74	33,159
1974-75	14,840
1975-76	10,593
1976-77	11,853
1977-78	24,888
1978-79	24,383
1979-80	36,145
1980-81	39,814

From the above it will be observed that a record number of private tubewells/pump sets have been energised by the UP State Electricity Board in 1980-81. An ambitious target of energisation of 41,270 private tubewells/pump sets has been fixed for the year 1981-82 thus leading to the path of breaking even the achievement of the last year.

lopment for the Sixth Plan are given in Table 3.

The physical achievements and additional targets for the Sixth Plan are given in Table 4.

The project estimates of four micro hydel schemes — three in Chamoli districts at Topowan, Therali and Sitapur Chatti with a total installed capacity of 1,370 kw and, one of 750 kw capacity at Suringad in Pitloragarh—have been cleared by the Planning Commission. These schemes on completion are expected to give benefits during 1983-84. Besides these, two new micro hydel schemes at Pilangad (2,000 kw) in Uttarkashi district and at Nagnath Pokhari (400 kw) in Chamoli district are being processed for approval of the Planning Commission.



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India's steel plans and world trend

By P. C. MAHANTI

AFTER a fairly long break, there is now a plan of development for the Indian steel industry although it might be said that the capacity and production targets do not exactly match the demand projections made by expert bodies. In the Sixth Plan, capacity target for steel is only 14.6 million tonnes, as against the existing 11.4 million tonnes—a bare 3.2 million tonnes rise over a five-year period. And if we consider that most of the proposed additional capacity is to come from expansions, which have been going on over the past six or seven years, then the Sixth Plan programme provides for just for some marginal additions to capacity at best.

Table 1 furnishes the production and capacity targets for the Sixth Plan period, as well as the next five years.

It will be seen from Table 1 that the Sixth Plan capacity target is 16.9 million tonnes (including the mini plants' 2.343 million tonnes) and 14.6 million tonnes if the mini plants are excluded. The output target is 14.51 million tonnes including 1.8 million tonnes from mini steel plants.

The demand for steel by 1984-85 (in finished terms) is worked out at 12.7 million tonnes which would correspond to an output of roughly 16 million tonnes of ingots. whereas the Plan provides for a saleable or finished steel output target of 11.5 million tonnes of ingots only. There will thus be a fairly wide gap between the domestic availability of steel and the economy's requirements. It is worth noting that the demand for finished steel in 1980-81 was estimated at eight million tonnes, which shows at what rate the demand for steel is likely to grow. It is also estimated that the finished steel demand is likely to go up further to 18.4 million tonnes by the end of the Seventh Plan, that is 1989-90, but then the Plan, as it stands at present, provides, for a saleable steel output of 17.3 million tonnes only, which would leave a sizeable gap to be covered by imports.

On the face of it it would appear to be wrong planning, since there is no effort to build up sufficient capacity over a ten year period to match output with demand. But past experience has made our planners adopt a cautious attitude. They have realised that unless there is the assurance of adequate infrastructure support to the steel industry at all times, additions to capacity in haste would only lead to frustrations such as the public sector steel plants have just gone through or are still going through.

If dearth of trained personnel was the main constraint for the government-owned plants in the initial years, growing infrastructural deficiencies in respect of coal, power and transport has hamstrung steel plant operations throughout the second half of the 'seventies. The infrastructural difficulties are not entirely out of the way. In fact, with the ongoing expansions of Bhilai and Bokaro to 4 million tonnes by the end of the Sixth Plan, and more later, infrastructural problems could conceivably become serious again. So by paying the same attention to infrastructure as to capacity building, the planners show a sense of realism that ought to be appreciated in the context of the industry's current problems. But they should not be too cautious all the time.

Steel consumption in the world has been rising even allowing for the recession years, that is the net effect over a long period. At the moment, the world steel output appears to have

Table I : Capacity and output projections up to 1989-90 through 1984-85

(Figures in '000 tonnes)

Plant		1980-81 (actuals)		1984-85		1989-90	
		Capacity	Output	Capacity	Output	Capacity	Output
1		2	3	4	5	6	7
Bhilai	Ingot steel	2,500	2,041	4,000	3,350	5,300	4,040
	Salable steel	1,965	1,817	3,153	2,640	4,310	3,240
Durgapur ..	Ingot steel	1,600	742	1,600	1,280	5,300	4,040
	Salable steel	1,239	598	1,239	1,000	4,310	3,240
Rourkela	Ingot steel	1,800	1,165	1,800	1,620	2,500	2,040
	Salable steel	1,225	985	1,213	1,160	1,730	1,470
Bokaro	Ingot steel	2,500	922	4,000	3,400	4,750	4,275
	Salable steel	2,000	826	3,156	2,680	3,754	3,380
Indian Iron ..	Ingot steel	1,000	609	1,000	800	1,000	850
	Salable steel	800	522	800	630	800	680
Tata Iron & Steel	Ingot steel	2,000	1,874	2,160	2,000	2,200	2,100
	Salable steel	1,500	1,537	1,740	1,600	1,764	1,680
Visakhapatnam ..	Ingot steel	..	..	..	..	3,385	3,050
	Salable steel	..	..	..	..	2,983	2,680
New Plant ..	Ingot steel	..	..	..	..	1,500	1,350
	Salable steel	..	..	..	..	1,270	1,150
Mini steel plants ..	Ingot steel	2,473	1,725	2,343	2,000	2,213	2,000
	Salable steel	2,225	1,552	2,109	1,800	(1,992)	1,800
Total	Ingot steel	13,873	9,078	16,903	14,450	24,848	21,358
	Salable steel	10,954	7,837	13,410	11,570	20,158	17,380

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reached a plateau, as not much additional capacity is being created, but sooner or later, steelmaking all over the world is bound to resume an expansionary course. We have this picture (Table 2) of world steel capacity from a projection made by a well known US firm of consultants.

Table 2 : World steel capacity

(In million tonnes)

	1980	1985	1990	% change 1980-90
Industrialised countries	365.14	422.54	462.57	+ 27
Developing countries	104.96	163.06	234.25	+ 123
USSR & East European communist countries ..	229.59	268.71	314.06	+ 37
China and North Korea	155.19	78.87	109.69	+ 99
	754.40	933.18	1.120.84	+ 48

It will be seen that the projection visualises a higher rate of growth in the developing world to which India belongs. Besides India, other major steel producing countries in the developing world are China, Brazil, Mexico, South Korea, Taiwan, Argentina, North Korea and Venezuela. Between them these countries account for over 90 per cent of the total output in the developing world, and it is in these countries that major expansions have been projected. Given their natural resource endowments there is no reason why they cannot attain a 123 per cent growth. In all probability, they will.

These countries have been substantial importers of iron and steel as their output today is only 10 per cent of the world total, while their consumption requirements are much more. As they progress on the economic scale through more and more industrialisation, their consumption requirement is bound to increase steadily. To meet the growing requirement they must necessarily produce more themselves or import from developed countries as hitherto. The former is the more preferable course.

Even countries in West Asia, Nigeria and Libya in Africa and Indonesia in South East Asia who have no ronmaking resources of their own but have enough oil wealth to pay for machinery as well as raw material imports, have plans to build steel mills of their own. Indian metallurgical consultants, M. N. Dastur & Co, are assisting the construction of a steel plant in Libya and the public sector Metallurgical and Engineering Consultants is, helping build a large-sized steel plant n Nigeria. If these countries are setting up steelmaking capacity obviously or their own all round development, here is every reason a country like ndia, endowed with vast raw material esources, a highly skilled manpower nd technical consultancy expertise omparable to the best in the world, hould aim at a continuous expansion f its industry even to the point of roducing a surplus. The world steel arket is bound to grow, especially the eveloping half will consume more and ore. So India can even afford to ursue a long-term policy of exports nd not one of the stop-go variety it as been pursuing so long, shutting out exports altogether in years of steel shortage.

Indeed if the infrastructural constraint can be completely got out of the way—the Central Government, it is encouraging to find, attaches so much of importance to this problem that there is a special Cabinet subcommittee under the chairmanship of the Finance Minister—India ought to attempt a much bolder steel development programme in the Seventh Five Year Plan than it has permitted itself to do.

The present time is quite favourable for a consistently forward looking expansionary policy. The developed half of the world, especially the European producers including the United Kingdom and the United States have not been adding to capacity because of technological obsolescene of their plants which were built probably in the early half of the present century. This obsolescence makes the plants totally uncompetitive in the current context of economic integration of Western Europe. In the United States as well, high cost plants go ill with the highly competetive ethos of the modern capitalist system. So such obsolete capacity is being cut out, and the industries are slimming themselves to keep fighting fit in free market terms. But this slimming process cannot go on indefinitely without hurting the economies themselves and sooner or later, rebuilding and expansions will have to start again.

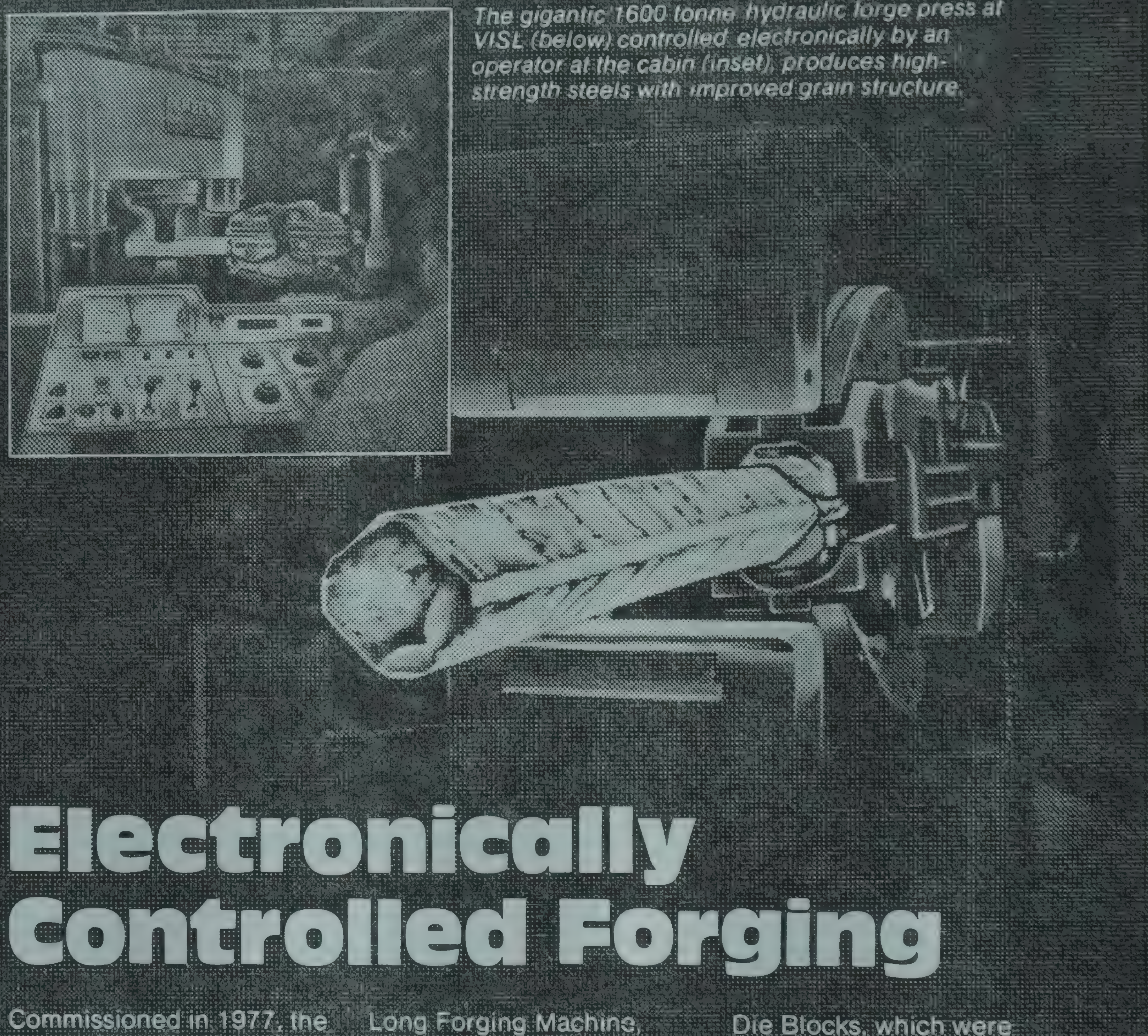
While the current pause lasts, the developing half of the world, especially the steel producing countries, should take advantage of idle capacity in steelmaking equipment plants, to get their plant and machinery on favourable terms, and where they lack money of their own as in the case of India, by liberal borrowing from the international capital market. The only rider is that once a decision has been taken on setting up plants with external commercial borrowing such as will be the case with Paradeep when the project goes through, a timebound programme of construction should be followed as strictly as it was in the case of the Kudremukh projec , so that the interest burden is kept down to a minimum.

Criteria for investments in steel

Concluded from page 29

ternative DR+EF does not seem to hold out any such attraction at all. It is true that in the latter case the ubiquitous shortages in electric power needed for melting ferrous scrap or a mix of sponge iron and scrap in electric furnaces has a decisive influence on the choice. Nevertheless, planning being for the long term, it would not be realistic to assume power shortages even in the future with which one is really concerned.

There are attempts to foreclose a complete discussion of the future route mix for the country. Secondly, one also withnesses a measure of *adhocism* in deciding about not only the choice of technology, but also regarding the strategy for attaining the long-term objectives in steel. There is no other explanation for the recent decisions to set up plants on several sites involving fragmentation of aggregate required capacity and the consequent sacrifice in the attainment of the economies of scale. Thirdly, the Planning Commission and several others (*e.g.* William Johnson 1967) have shown that even under the best of circumstances steel plants to be set up outside the Bihar, Orissa, West Bengal, MP zone would suffer cost disadvantages under any arrangement for coal including imports. Port-based plants would have to be worked to Japanese levels of efficiency if they have to commercially do well. Some of these larger questions apparently have not received as much attention as they merit.



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Energy conservation efforts in steel works

By **K. C. KHANNA**, *Chairman, SAIL.*

THE steel industry the world over is highly energy intensive in view of the following facts :

(i) the processes for making and processing of steel take place at rather elevated temperatures.

(ii) the sensible and the latent heats of output materials from the individual processes are not fully utilised in the down stream processes either due to technological or logistic constraints.

Historically the steel industry has always been energy conscious. Over the years newer processes have been introduced which are more energy efficient. The energy conservation efforts received a new major thrust with the global energy crisis triggered by the sudden spurt in the prices of petroleum fuels in 1973. In view of the rapid escalation of the petroleum fuel price ever since, the importance of the energy conservation efforts can hardly be overemphasised.

Specific energy consumption in the Indian steel plants varies in the range of 9-14 Mkcal per tonne of saleable steel. This level of specific energy consumption is much higher than that in the technologically advanced countries. The specific energy consumption per tonne of steel cannot be considered to be an effective means of comparing the real energy efficiency between steel works as this parameter depends upon quality of input materials, product mix, equipment type, production sizes, etc. However, this parameter can be used as a macro indicator for energy conservation efforts. A detailed analysis of the energy flow, energy consumption for individual processes and identification of parameters influencing the energy consumption pattern is necessary for a better insight into the problem. Let us take an overview of the energy consumption pattern in the steel plants in India and the efforts being made for energy conservation. Some specific cases where these efforts have already yielded significant results are also mentioned briefly.

Energy consumption pattern

The main energy inputs to the steel plants for the year 1980-81 are given in Table-I. These include coking coal for production of coke, non-coking coal for use in the boilers, electricity and petroleum fuels. It may be noted that contribution of different energy inputs to the integrated steel plants is as follows :

Coking coal	— 70 — 85 %
Petroleum fuel	— 2 — 7 %
Electricity	— 1 — 3 %
Non-coking coal	— 10 — 25 %

A major part of the fuel needs of the steel plants is met from the inplant generated by-product fuels, *viz.* coke oven gas, blast furnace gas and coal tar fuels. The fuel deficit, if any, is met by using purchased petroleum fuels furnace oil/LSHS.

It is also worth noting that 64-72 per cent of the total energy is consumed up to the ironmaking stage itself. The remaining energy is used in the steel making, rolling and finishing operations as may be seen from the data given below :

Operation	*Percentage energy consumption per tonne*
Ironmaking	64 — 72
Steelmaking	10 — 26
Primary rolling	4 — 11
Finishing mill	4 — 20

High percentage of energy usage up to the iron making stage is contributed by high coke rates in blast furnace operation. Coke rate in Indian steel plants varies from 700-1,000 kg per tonne of hot metal. In contrast to this, typical corresponding figure of Japan is about 430 kg. Quality of our input materials is mainly responsible for high coke rates in our plants. Ash content of our coke is as high as 30 per cent as against below 15 per cent in Japan and other countries Another major contributing factor is adverse alumina to silica ratio in our iron ores.

Approach for energy conservation

It is clear that a two pronged approach is required for energy conservation in the steel plants, *viz.*

(i) lowering of coke rates in blast furnace by better preparation of burden charge, use of higher percentage of sinter in the burden or use of sinter with higher basicity, introduction of optimum slag regime, use of higher blast temperature 1,000 to 1,100°C, introduction of high top pressure operation, improved instrumentation and control system as well as appropriate indigenous technologies for obviating specific raw material constraints under Indian conditions.

(ii) efficient fuel and energy utilisation by

- — minimising losses during handling and storage of fuels
- — improved fuel combustion
- — minimising heat losses from furnaces by better insulation
- — development of optimum thermal regime for different furnaces
- — minimising energy losses by prevention of leaks *etc* in the pipeline carrying hot fluids like steam
- — better waste heat recovery
- — better co-ordination between shops to reduce unnecessary energy losses
- — better energy management of shops with the aid of modern instruments and micro-processor based control systems.

Keeping the above basic approaches in view we are preparing detailed action plants shop-wise for energy conservation for each steel plant. This is being done in a co-ordinated manner by the concerned operation department, Energy & Economy department and our R & D Centre. Model detailed action plans for a few shops have already been prepared. These plans clearly spell out the targets to be achieved by 1981-82, by 1985-86 and by 1989-90. Specific steps required to be taken for achieving these targets have also been worked out. Thus a comprehensive *corporate energy conservation plan* is being evolved for the present decade aimed at elimination of petroleum fuel usage in the steel plants and conservation of coking coal.

A number of specific projects have been taken up in our steel plants with a view to conserve energy. Some of the projects have been completed with significant benefits while others are in progress. Brief details about some of these projects are discussed below.

(A) Lowering of coke rates in blast furnace

Our efforts in this area are directed towards tackling the quality problems of the input materials to the blast furnace, intensification of the blast furnace process through various means, development of novel technology and use of auxiliary fuels.

(a) *Selective removal of alumina from iron ores*

For this purpose a special additive developed by Regional Research Laboratory, Jorhat, is being tested on commercial scale. Initial results have been encouraging. Sustained trials are now in progress in 600 tonnes per hour iron ore washing system at Barsua iron ore mines of Rourkela steel plant. Selective removal of alumina from iron ores will result in lower slag rate and coke rate in blast furnace operation.

(b) *Process intensification*

Blast furnace intensification can be achieved, among other things, by use of increased percentage of sinter in the charge or use of burden with high basicity for elimination of raw limestone in burden, higher blast temperature, and development of optimum slag regime. Following projects are being pursued.

(i) Percentage sinter usage in our blast furnaces is generally low ranging from 0-50 per cent. Increase in the use of sinter preferably with higher basicity can be achieved by ensuring smooth running of the sintering machines and by providing additional sinter production capacity. Alternative approach can be to use higher basicity sinter in order to eliminate raw flux input in the charge, even if sinter rate is low. We have been successful in reducing coke rate in one blast furnace at Bhilai Steel Plant by elimination of raw limestone in burden even at 55 per cent sinter rate using a sinter of basicity about 3.

(ii) Blast temperature in Indian blast furnaces range from 600 to 900°C. In our steel plants increase in blast temperatures to a level of about 1,000°C is considered necessary primarily for reduction in coke rate. For obtaining higher blast temperature certain modifications in the checker design of the stoves have to be made. The quality of blow pipes also has to be improved. At Bhilai Steel Plant necessary modifications are being made to increase the blast temperature to about 1,100°C for blast furnace No. 2 in connection with the coal dust injection programme.

(iii) Slag composition optimisation is essential for smooth functioning of the blast furnaces and thereby increase productivity and reduce coke rate. High MgO slag practice has now been accepted as the standard practice for the Indian conditions and is being practised.

(c) *Lime dust injection*

The idea of injection of lime dust through the tuyeres was conceived by our R & D Centre. It has been successfully developed and tested in 100-tonne per day blast furnace in Kalinga Iron Works, Barbil. The basic idea is to provide lime in highly reactive stage at the location where ash of the coke which is acidic in nature is released. About 7 per cent increase in productivity with corresponding decrease in carbon rate has been achieved at Barbil. It is now planned to undertake scaled up trials in one blast furnace at Durgapur Steel Plant.

(d) *Injection of auxiliary fuels in blast furnaces*

In advanced countries injection of oil in the tuyeres region of the blast furnace has been established. In the Indian context, non-coking coal injection developed in Soviet Union as well as USA is more relevant. Coal dust injection facilities are being provided in one of the blast furnaces at Bhilai Steel Plant on an experimental basis. The system being provided will be capable of injecting up to 133 kg of coal dust per tonne of hot metal thereby reducing coke rate by 150 kg per tonne of hot metal.

(B) Efficient utilisation of fuel and energy

In this area our efforts aim at reduction of fuel consumption rates per tonne of the throughput for different furnaces like OH furnaces for steel making, soaking pits and reheating furnaces. While significant results have been achieved in OH furnaces and soaking pits, work in reheating furnaces area has just been initiated

i) *Open hearth furnaces*

A project on development of optimum thermal and oxygen regime of OH steel making in Bhilai Steel Plant is in progress. After extensive trials a modified thermal and oxygen regime has been identified which shows a potential of very significant reduction in specific fuel consumption (15 per cent to 20 per cent). Further trials with the modified regime are under progress. A similar projects is being taken up in the Durgapur Steel Plant.

Table I : Energy inputs to steel plants in 1980-81

Steel Plants	Coking Coal	Non-coking Coal	Purchased Electricity	Fce oil/ LSHS	Naphtha
	Million tonnes	Million tonnes	10^6 MWH	Kilo litres	Kilo litres
Bhilai	2.99	0.39	0.42		20,000
Rourkela	1.85	0.21	0.50	1,06.000	0
Durgapur	1.57	0.20	0.22	72.000	0
Bokaro	2.50	0.63	0.40	10.000	0
Indian Iron	1.47	0.43	0.10	17.000	0
Tata Iron	2.21	0.86	—	1,09,000	0
Total	12.59	2.72	1.64	3,14.000	20,000

ii) *Soaking pits*

Oxygen enrichment of combustion air was initially tried in one soaking pit at Rourkela Steel Plant. The results showed about 15 per cent decrease in heating time and about 10 per cent decrease in specific fuel consumption for cold ingot charge. Encouraged by the results, oxygen enrichment facilities have been extended to six soaking pits.

Recently similar trials were carried out in Durgapur Steel Plant which showed a reduction of about two hours in the total heating time along with about 15 per cent reduction in specific fuel consumption for cold ingot charge. It is now planned to extend oxygen enrichment facilities to other pits.

A comprehensive project is in progress at the Bhilai Steel Plant which is aimed at 15 per cent to 20 per cent increase in productivity of soaking pits for cold ingot charge thereby improving fuel efficiency. Certain specific modifications in the soaking pit design and operation have been tried with initial positive results as per expectations. Further trials are being carried out before introducing similar modifications in other soaking pits.

iii) *Improvement in combustion systems*

The burners presently used in the steel plant furnaces are of rather vintage era. To make use of the latest developments in combustion technology we are setting up experimental furnace facilities within the premises of one of our steel plants. This facility will be used for characterisation of burner systems presently used and for defining improvements in the design and operational parameters of the combustion systems.

To sum up it may be mentioned here that *SAIL* is fully conscious of the urgent need for sustained energy conservation efforts in the steel industry. To ensure quick realisation of the benefits a systematic approach has been adopted wherein all concerned engineers from operation departments, Energy & Economy departments and R & D Centre are working together on implementation of clearly defined action plans for energy conservation. Some of the projects have shown significant benefits while many others are in progress. We have a long way to go. There is no short cut to energy conservation other than relentless and pointed efforts in individually identified energy consuming operations/centres/processes. We would continue to move in this direction. Success is well within our reach.

Role of mini steel plants in next decade

By **UMESH KUMAR MODI**

Mr U. K. Modi

THE demand for steel by the year 1988-89 is expected to grow up to 17 million tonnes from about 12 million tonnes from 1983-84. The categories of products which mini steel plants can manufacture in respect of the demand will go up to 8.5 million tonnes. The growth of demand for the bars, rods and light sections will therefore be 2.65 million tonnes for 1983-84. The strategy for meeting this extra demand could be as follows:

(a) Obtaining increased output from existing integrated steel plants by fuller utilisation and by putting up new integrated steel plants to keep with the increasing demand.

(b) Obtaining either the bulk or whole of the demand from mini steel sector (based on sponge iron route).

Advantages

In this context, I would like to highlight the advantages of setting up new mini steel plants against new integrated steel plants.

(a) Today the investment costs of an integrated steel plant will work out to Rs 15,000 per tonne of ingot. This has been amply proved by the cost estimates for integrated steel plant of 1.5 million tonnes capacity to be located at the Paradip port.

As against this, the investment cost per tonne of a mini steel plant with a capacity of one lakh tonnes routed through sponge iron unit, electric arc furnaces, concast unit and rolling mill will be around Rs 5,000 per tonne. The total investment for such a plant will not be above Rs 50 crores (an investment of Rs 28 crores will be for sponge iron unit and Rs 22 crores will be for steel unit). Thus, if the alternative of putting up mini steel plant is adopted then a saving of about Rs 1,000 per tonne in the investment cost can be envisaged and this being so, the total saving on a production of 2.65 million tonnes will be Rs 2,650 crores.

Over and above the higher investment cost per tonne in case of an integrated steel plant, resulting in an increased cost of production, it also gives rise to problems of financing. Even in a small country blessed with rich natural mineral resources, the investment in an economic size integrated steel plant would swallow a significant portion of gross capital formation. The example of Paradip plant mentioned above too indicates the same and the nation may have to set aside huge sum annually to complete putting up of such plants. Moreover to organise the infrastructural facilities for such tonnage steel plants based on iron ore put a severe strain on the resources of the nation.

(b) The technology of integrated steel plants using non-coking coal is still not established and we will have to rely on large scale import of coking coal.

(c) Lower gestation period.

(d) Ability to satisfy the regional demands by putting up plants at the consuming centres and thereby eliminating the problems involved in the movement of materials.

(e) Ability to give short deliveries and change in the product mix if required.

(f) Ability to expand melting facility if the market requirements so demand.

As against the above advantages, following are the disadvantages which, in my opinion, are not so considerable compared with advantages so far explained.

1. Higher cost of production of mini steel products in comparison with integrated steel plants.

2. Requirement of larger quantities of power when the country is already facing acute shortage.

Number of hurdles

The mini steel plants currently face a number of hurdles and, as a result, their production has been more or less stagnant for the last three years at around 1.8 million tonnes as against a capacity of 3.42 million tonnes. The problems need to be looked into carefully by the authorities as the country cannot afford to have the luxury of idle capacity.

Power continues to be the most irritant factor in the Indian industry. The power situation, it is officially claimed, has shown an improvement but industry continues to have a shortage of it. The inefficient operations and the management of power plants has come to be an accepted way of life. But this is crippling the Indian industry not only at present but also in the years to come. I hope that the Central Government and the State Electricity Boards will pay utmost attention to improve the efficiency of power plants. This industrial sector (power generation), as I have said on an earlier occasion, should be given to those organisations who can run it efficiently whether they belong to public sector, joint sector or private sector. Today every industrialist, worker or trader or farmer, only asks this question : what is the Government doing to improve the power generation which affects every one's life in one way or the other?

Mr Modi is managing director, Modi Steels.

The effect of the power cut on the mini steel plants is much more than in many other industries because of the differentials in power cuts. The power cut on regular industry is much less than in mini steel plants. If this kind of situation continues the mini steel plants cannot flourish.

In this regard, I would also like to put up a proposal that in the above circumstances the government should encourage captive power plants by the mini steel industry. It is only possible if the following concessions are given to the mini steel industry.

1. A debt equity ratio of 4:1
2. Soft loan facility
3. A minimum of 10 per cent subsidy

Shortage of scrap

Another most important factor responsible for less production is the acute shortage of scrap. In our country the scrap availability is only around 1.6 to 1.65 million tonnes as against a total capacity required of 3.4 million tonnes. The only alternative today is to turn to imports. The scrap is available from three main sources, namely, (1) USA, (2) Middle East and (3) Sponge Iron.

Today because of the recession in the US economy the prices of scrap have come down to a level which can prove economical for use by electric arc furnaces in India because the demand at present in this country is very high. But the scrap imports have not touched required expected levels. For example scrap imports in 1979-80 were 98,000 tonnes. In 1980-81, out of the total imports of 97,000 expected, in the period April-December 1980, direct imports are 72,175 tonnes and imports through MSTC will be about 24,853 tonnes. Larger imports did not materialise for the following reasons.

MSTC is the canalising agency for scrap imports. Although the commission payable to MSTC has recently been reduced from four per cent to 2½ per cent, still the procedure of importing through the canalising agency has resulted in inordinate delays and thus the quantity coming is very less. In comparison to this about 15 companies which have been allowed to import freely have given a very good account of themselves. This year it is expected that they will be able to import 1,00,000 tonnes compared to only 60,000 tonnes by MSTC which has been the canalising agency for the rest of the 130 units. Therefore, once again I would like to reiterate that scrap import should be only on OGL.

Scrap from Middle East

Last September, Government took a decision to have a trial import of scrap from Middle East through MSTC. We are happy to note that the MSTC had sent a delegation to the Middle East for the survey of the scrap available there and for the import of some of the scrap on a trial basis. It is indeed a matter of gratification to note that a contract has been finalised for the import of 12,000 tonnes of scrap.

I feel that the Middle East is certainly advantageous because of the following reasons:

(a) Availability in the Middle East: The scrap from the Middle East can be imported in smaller lots of 3,000 to 5,000 tonnes by individual buyers eliminating the difficulties involved in clubbing together the requirements of scrap, shipment handling, etc.

(b) Lower prices: The scrap available in the Middle East is much cheaper than the scrap available from Delhi sources because of the differences in freight. Anyhow this import will demonstrate beyond doubt the economics of using this material and thereafter immediate steps have to be taken to import large quantities and I sincerely hope MSTC will take early steps to import at least one lakh tonnes of scrap from this source.

Sponge iron

Sponge iron has already started coming from Indonesia. The trial quantity of 30,000 tonnes has already arrived and distributed to the members. The results of the sponge iron used have proved quite encouraging. Earlier this year I had been to Indonesia as a member of the delegation to finalise the price at which fresh contracts could be entered for the import of sponge iron. After a series of negotiations it was possible to successfully finalise a deal for a quantity of four to five lakh tonnes to be imported.

Having mentioned much about the important raw material like scrap and the need of import of scrap and sponge iron, I would like to dwell on the need for making available sponge iron indigenously and express the views of the industry in general on the subject.

As all of us are aware, the demonstration plant with the capacity of 100 tonnes per day has gone in production at Kothagudam with LURGI technology. The initial reports from the plant are good. It is also understood that this plant has achieved in short time the full capacity per day and the metallisation is 92 per cent. I personally think it is an important break through and if the results will continue to be so good in the long run, the face of mini steel industry would undergo a drastic change in years to come.

Another sponge iron plant in collaboration with Messrs Allis Chalmers Corporation of USA has been put up at Tangreni in Orissa with a capacity of 1,65,000 million tonnes per year and is expected to come into production by September 1981. Every one in the industry is anxiously looking forward also for its successful production and the results.

India with its rich reserves of iron ore, non-coking coal and limestone is the most appropriate country for putting up sponge iron producing units. As stated earlier, the installed capacity of mini steel plants is about 3.4 million tonnes whereas the scrap available in the country is sufficient only for the production of 1.8 million tonnes, leaving a gap 1.6 million tonnes of scrap.

Sponge iron is the only alternative to scrap and, therefore, by 1985 we should plan for putting up a capacity of at least one million tonnes of sponge iron. This capacity can be created only by allowing the private sector to come forward and set up sponge iron units by following a pragmatic policy. This industry should be thrown open to the private sector without restriction and given priority as in the case of cement industry.

Diversion

The crusade which was taken by the Ministry of Steel and Mines to initiate the conversion of more and more mini steel plants from mild steel to special and alloy steels has shown some progress although the progress has been slow.

Many of the units which were previously engaged in the production of mild steel and plain carbon steel has started diversifying into the following grades of special and alloy steels.

(a) Spring steel

(b) Forging quality steel up to 63 mm RCS

(c) File Steel

(d) Plain carbon special steel.

But there is considerable scope for the import of the following grades of steel in large quantities.

(a) Wire rods/bars for cold heading purpose

(b) High carbon wire rods for special wires like textile quality, spring steel, tyre bead, etc.

(c) Leaded free cutting steel flats and sections

(d) High sulphur free cutting bars and rods

(e) Wire rods of carbon above 0.85 per cent.

The inability of mini steel plants in achieving the increased production targets of the above grades of steel is not because of their technical incompetency, but because the production of these steels is uneconomical. Mini Steel plants are in a position to produce indigenously these steels only because of higher costs of production but are unable to compete with the foreign suppliers only because of the higher cost of production. This high cost of production is attributed especially to the high price of the following items :—

1. Scrap
2. Power
3. Electrodes
4. Refractors
5. Ferro alloys
6. Furnace oil
7. High cost of working capital
8. Low tonnage requirement of various grades and sizes

The ever increasing cost of the above, is making operations of mini steel plants more uneconomical and the mini steel plants cannot compete with foreign supplies because their cost of production is much lower. This, at the first instance, has given a slow pace to the scheme of diversification into these special and alloy steels and save valuable foreign exchange of the country. I suggest that a high power committee consisting of the Joint Secretary and the Industrial Advisor to the Iron and Steel Controller may go into the ways and means of finding the scope for giving enough incentives or protection to the mini steel plants to produce the same.

I suggest that it should be the efforts of all concerned to fill the gap between demand availability of special and alloy steels by more mini steel plants going for diversification into special and alloy steels through continuous casting route. We are very thankful to the Ministry for recognising the future of mini steel plants through continuous casting as in the case of Europe and USA. We are also particularly thankful for allowing the mini steel plants to set up continuous casting installations. But in India the mini steel plants which are having a continuous casting facilities are only engaged in manufacturing of plain carbon steels rods. The continuous casting route has the following advantages over the conventional ingot route.

(a) Low investment cost

(b) Higher yield by about 10 per cent

(c) Lower cost of production

Thus, if this technology is developed today, the existing alloy steel plants which are utilising their existing capacity to manufacture lower sections of special and alloy steels through cogging and forging process can utilise it to make larger sections, while lower sections could be produced by the continuous casting process. For this purpose, it is essential that the Government allows free import of advanced technology from abroad.

After undertaking an elaborate study of the various advantages of continuous casting, policies can be formulated for encouraging the mini steel plants to convert their production into alloy and special steel grades.

BOKARO STEEL NEWS
(Steel Authority of India Limited)

Bokaro Steel workers save Rs 1 crore through Co-op Credit Societies

In the three years that the Bokaro Steel Employees Co-operative Credit Societies have been in operation, they have shown phenomenal and multi-dimensional growth.

One of their major objectives is to provide credit to workers. The Societies have already loaned out Rs 5 crores. Recovery of loans has also been excellent since they are deducted from salaries.

The Societies have also helped to promote the personal savings habit. Through these Societies alone, Bokaro workers have saved over Rs 1 crore! With compulsory savings of Rs 6 lakhs every month, Rs 75 lakhs are being added to the working capital every year. The Societies have also proved to be extremely profitable. They have regularly declared 10% dividend, the maximum allowed by the Bihar Government, to their members.

These Societies are making a visible impact on the lives of workers. Today, workers have money they can call their own. Money in the bank. Money for an emergency. Money for the future. This is why one no longer sees the familiar figure of the moneylender at Bokaro's plant gates.

More than a steel plant—
a home for 40,000 people

Bokaro Steel has brought about tremendous socio-economic changes in its environment. Struggling villages have given way to a planned city. Parks, schools, medical facilities and shopping centres have transformed lifestyles. Through its welfare activities, Bokaro Steel is enriching its people's lives.

An example to all other co-operatives

These Societies are indeed models of how a co-operative should be run. All of them have nominated representatives of the Plant as Secretaries and Chairman. The operating procedures leave no room for malpractices. Loans are processed on a 'first come, first served' basis. Honorary auditors make regular checks.

A record of sound financial performance

Number of Societies
11 (10 at Bokaro Steel City, 1 at Calcutta)

Number of members
12,000

Commenced working
June 1978

Total loans disbursed
Over Rs 5 crores

Total amount recovered
Rs 2.75 crores

Loan in circulation
Rs 2.25 crores

Current monthly loans disbursed
Rs 35 lakhs

Net Profits
1978-79 Rs 4.5 lakhs
1979-80 Rs 8 lakhs

Dividend declared
1978-79 8.5 to 10%
1979-80 10% (All Societies)
(Maximum permissible under the Act)

Members' total deposits
Over Rs 1 crore

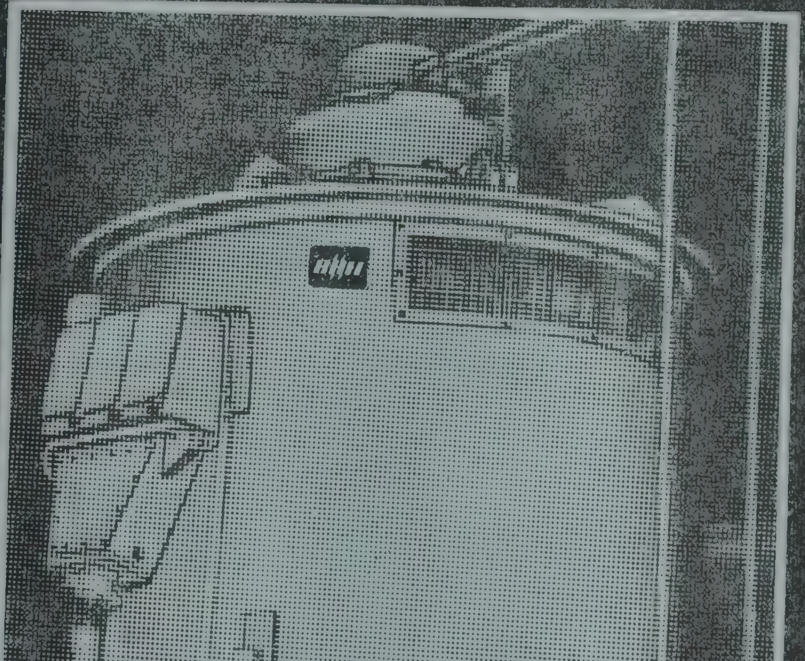
Recurring annual saving by members
Over Rs 75 lakhs

BHEL scores a hat trick

Korba

Singrauli

Ramagundam



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- 7 Nos. 1325 KW, 500 RPM, SP/DP Motors for Ramagundam.

Earlier BHEL had already supplied 13 Nos. 1500 KW Vertical Motors to Bhusawal & Kudremukh Projects and dozens of other Vertical Motors to various power stations.

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- Class 'F' insulated.
- Available in SP/DP, CACW & CACA Enclosures.

BHEL's Motor manufacturing Divisions at Bhopal, Hardwar & Hyderabad have already supplied about 20,000 Nos. of AC & DC Motors for various applications and these include 2 Nos. 12500 KW horizontal motors for Bhilai Steel Plant, 2 Nos. 9000 KW motors for BALCO & 4000 KW Boiler Feed Pump Motors for various power stations.

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CAS-318

Criteria for investments in steel

By S. V. CHAR

THE Sixth Five-Year Plan has envisaged a steel ingot (crude) capacity of about 18 million tonnes for 1984-85. This is as against the existing capacity of the order of 14.67 mt including around 4 mt in ministeel units. Thus, over the plan period there would be an increase of about 23 per cent. Practically, the entire expansion in capacity and in production has been planned to be obtained in the integrated plant segment of the steel industry. A marginal expansion of the order of 1,70,000 tonnes has been projected for ministeel units. In other words, the present freeze of ministeel capacity would continue unless, of course, the government contemplates a mid-course correction. This is possible only if the supply position in regard to critical input items such as electric power, ferrous scrap, graphite electrodes and refractories becomes much less difficult than at present.

In view of the heavy capital deepening as well as the long gestation periods involved in the iron and steel industry, investments have to fulfil certain vital criteria and decisions for promoting its development have to be taken on the basis of perspective plans covering normally a 10-15 year period if not longer. For the same reasons, its growth is sometimes envisaged in an autonomous manner without drawing much of a sustenance and relevance from the quinquennial national plans. Thus, the White Paper on the Steel Industry (1976) had mentioned a tentative target capacity of 75 mt by 2000 AD. Other projections have placed the required crude steel production at about 25 million tonnes by 1988.

The highlights of the strategy to achieve the Sixth Plan targets are: removal of infrastructural constraints, setting up captive power plants, undertaking R&D activities in a more intensive manner, implementation of expansion, modernisation and replacement programmes as well as creation of new capacity at Vizag and elsewhere.

Conspicuous lacuna

A conspicuous lacuna in the discussions regarding development of the iron and steel industry in India relates to the selection of relevant technology. Basically there are two iron and steelmaking processes : one is the conventional coke metallurgy route employing the Blast Furnace + Linz Donowitz converters or BF+LD. More recently, in the place of LD converters Q–BOP (Quick Quality, Quantity–Bottom Blowing Oxygen Process) is being employed. The BF+LD or BF + Q–BOP route calls for lumpy investments in coke oven battery complex and other indivisibilities such as BFs, steelmaking shops, post ingot facilities, auxiliary workshops, power systems and townships.

The second route, which in relative terms is not so conventional is the Direct Reduction + Electric Furnace (DR+EF) route. While this route can do without coking coal which is a scarce item, nevertheless it is a power-intensive operation. Capital costs per tonne of capacity created on a greenfield site would be far less than under the BF+LD route. Our computations show that it would be even slightly less than the costs per tonne of capacity created on a BF+LD brownfield site through expansion. Where DR of iron-ore into sponge iron is based on a solid reductant such as ordinary coal or even lignite, there are no resource constraints as when such DR process is natural gas-based. Unless natural gas allocations are forthcoming in adequate volumes and the price of gas so allocated is also, calorie for calorie, as attractive as that of coal, the DR+LD holds out no attraction. Synthetic gas manufacture through coal gasification is definitely possible, but the major hitch here is the technological immaturity of the processes for making synthetic gas on a commercial scale. Together with the technological infancy of DR processes themselves, particularly in India, synthetic gas-based DR+EF would pose too formidable a challenge to be accepted readily without adequate R&D support.

It is true that one cannot ignore the several variations of the iron and steel processes. For instance, for making iron, besides the BF and DR there are also smelting furnaces such as the Tyesland Hole or Elkem furnaces which can be vertically integrated with an LD converter such as at the Chandrapur plant of Maharashtra Electrosmelt Limited. For steelmaking besides the LD and Q–BOP, there are processes such as open hearth, twin hearth, LD-AC, Rotar, Kaldo, etc. However, we may choose to concentrate on the two basic routes, *viz* BF+LD and DR+EF.

At present, several sites for new steel plants have already been selected or likely to be selected. Some of them are coast-based such as Vizag where the construction work has already commenced and Paradip, Mangalore, Goa and others. The other sites mentioned are Vijaynagar (Hospet), Nayagarh, Surajgarh, Bailadila, etc. Steel industries from other countries such as Demag of Germany, British Steel and Davy of UK, Sacilor of France, Italsider of Italy, Nippon of Japan and also state organisations in USSR are evincing interest in forging collaboration for establishing new capacity whether by way of expansion of existing units or on greenfield sites mentioned earlier.

Cost-benefit analysis

Albeit the basic and strategic importance of the steel industry to the economy, the massive investments that it entails now for benefits to accrue about a decade hereafter calls for a thorough cost-benefit analysis of such investments. Such a CB study would have to invariably reckon with the opportunity cost of such funds with reference to the unemployment problem. As a matter of fact, such investments in the capital-intensive steel industry hardly make a dent on the unemployment problem of even just one district in which the steel plant is to be located. This is because each unit employs directly at the most 50,000 to 60,000 people.

Assuming the overall costs of a hypothetical unit to be about Rs 3,000 crores, an investment of over Rs 6 lakhs would have to be made just to employ one person, whereas there are several well thought-out schemes for providing gainful employment to about 50 persons with the same investment. Secondly, considering the long gestation periods for the steel industry which are further lengthened on account of one or the other hitch which invariably crops up, such as shortage of finance in particular, pouring large sums into the erection of steel capacity is somewhat like Max Gammon's black holes into which public expenditure disappears with not an ounce of product emerging therefrom for a long period. The inflationary nature of such expenditure cannot be ignored.

Leaving aside such a basic issue, one often witnesses a cynical rejection of valid criteria which should govern the setting up of integrated steel plants such as external economies in the nature

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Dr Char is Senior Executive (Economics), Mahindra Ugine Steel Co Ltd.

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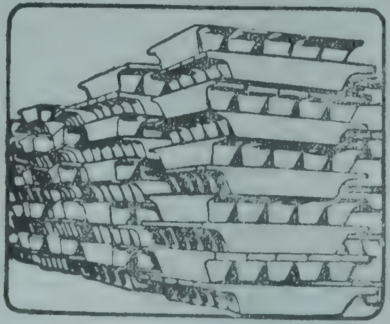

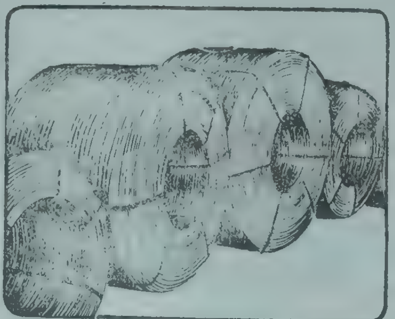

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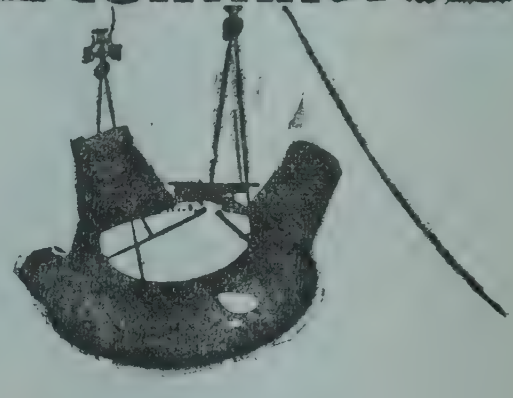

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of proximity to raw materials which are of a weight-losing nature, ease in marketing (freight costs should not be high relative to the value of steel), adequate resource support and so forth. Not infrequently politicians dally with populism. The state governments also romanticise their claims for an integrated steel plant. Consequently, there has been some permissiveness in decision-making about location of new steel units. It is, therefore, no wonder that feasibility reports do show that some of the proposed plants would not be harbingers of prosperity, but would only serve to be status symbols, white elephants or even eyesores.

Cost of delay

A classic example relates to the manner in which it was decided to establish the steel plant at Visakhapatnam. It was in the mid-sixties that the agitation with the slogan *'Visaka Ukku, Andhra Hakku'* (meaning Vizag steel is Andhra's birthright) was launched. The foundation stone was laid in 1971 to coincide with the general elections. However, the decision to commission a detailed project had to wait till October 1973. Dastur & Co submitted the report in 1977 just at the time the Janata Government came to power. Further delays were there in arriving at an agreement with Soviet authorities. After a long period of incubation, a tight commissioning schedule has now been drawn up according to which the foundation work for the Vizag plant will commence in October 1981 and the plant would be ready for operations by October 1985. Thus, it has taken over 11 years after decision was taken to commission the construction operations. The cost of delay about which much has been said in these columns has been of a back-breaking nature.

A number of strong points has been associated with the Vizag plant. It being a coast-based plant, it would be convenient to import raw materials, in particular, coking coal which need not have to be transported over any land route at a sizeable freight cost. Similarly, finished products especially pig iron earmarked for exports need not have to be moved over any land route. It has been claimed that individual pieces of equipment would be of a large size enabling achievement of scale economies. Continuous casting facilities for blooms and billets would be employed effecting savings in energy as well as in labour costs.

More recently, the Steel Authority of India Limited has finally cleared the Vijaynagar steel project and forwarded its recommendation to the Ministry of Steel, for due approval. Thereafter, the public investments board on which members of the Planning Commission, Steel Ministry, Finance Ministry and the SAIL itself have been represented would have to give consent to the proposal before it is placed before the Cabinet for the final imprimatur.

Minimum size

It is in this setting that one would have to consider the economic viability of future steel plants with particular reference to certain techno-economic criteria. In the first place our studies as well as by others have established the fact that the minimum efficient size for an integrated steel plant anywhere in the world including in India cannot be less than six million tonnes of raw steel. Only then it would be possible to attain about 90-95 per cent of the available scale dependent internal economies, especially those termed as engineering or technical economies. Capital and revenue cost savings are mainly on account of indivisibilities and area-volume relationships. Even for a reasonably economic size plant for achieving about 85 per cent of the scale economies, a minimum capacity of 5 million tonnes is called for. As against this techno-economic standard, the proposed size of the Vizag plant is only 3.2 million tonnes, even after the completion of the second phase. Similarly, in the case of the Vijaynagar plant, almost the same capacity size is being contemplated. There are, thus, enough examples to show that scale economies are being sacrificed.

It is true, however, that more recently the strategy for creation of steel capacity relies to some extent on expansion of existing units. Hopefully, this would raise the capacity in individual steel plants to around 5 million tonnes such as in the case of the Bokaro steel plant which is expected to reach capacity of 4.75 million tonnes by 1986-87. By and large, however, the pernicious practice of building steel plants in stages and over-dimensioning them with a view to cheapen future expansion persists. In other countries particularly in Japan, the plants are designed for a desired rated capacity and facilities in all the production departments are installed simultaneously so that when the plant is commissioned, the entire unit runs to full capacity with no idling of equipment whatsoever. This is very much unlike in India where overdimensioned facilities involving large investments remain idle for several years.

Economic viability

Yet another major issue relates to the economic viability of new units to be set up along the coast or in the interior. For a hypothetical plant the capital cost per tonne of capacity created is likely to be about Rs 11,000 to Rs 12,000/tonne. This would mean that the capital cost per tonne of production assuming a 20 per cent capital charge including depreciation and interest would be about Rs 2,200 to Rs 2,400 or even higher if the production of finished steel is less than 3 million tonnes. According to a recent report the capital cost per tonne of billet at Vijaynagar is likely to be as much as Rs 5,000/tonne. The present market price for rounds and bars is about Rs 4,000/tonne. Thus, the capital charges alone would work out to about 50-60 per cent of the current market prices.

For vintage steel plants capital costs may work out to about 15 per cent of the works cost comprising cost of inputs, labour and overheads only. For units such as Bhilai it may work out to about 20 per cent, whereas for the new plants Vizag or Vijaynagar it would be much higher as mentioned above. unless of course as in the case of Vijaynagar the product-mix comprises flat products such as coils, skelp and sheets for which JPC prices are in the range of about Rs 4,000 to Rs 6,000/t (f.o.r. railhead station) for tested categories.

This single factor alone raises seriout doubts about the commercial viability of the new plants, unless of course one prays for sharp escalations in iron and steel prices, which would be adequate to prevent cash loss. The very first feasibility reports actually said so. Even if one assumes such higher target prices, one cannot ignore the more basic question of the wider implications of such developments in public expenditure on the economy and distributive justice. Will the Steel Ministry, Public Investments Board and the Planning Commission undertake a thorough study into these basic criteria for investments before clearing new projects? It is a good augury that in respect of a new plant to be set up the Ministry has just now called for an assessment of the additional investments in infrastructure which appear to have been either underestimated or not reckoned with at all.

The foregoing discussion brings us back to the question of choice of technology. BF+LD alone happens to be the status symbol with all glamour despite its adverse bearing on the distributional aspects of public expenditure. The al-

Continued on page 19

Salem goes on stream

From OUR SPECIAL CORRESPONDENT

MADRAS

TAMIL NADU's long cherished dream to have a steel plant at Salem came true on September 13 when glistering stainless steel strips rolled out of the Sendzimir mill of the Rs 167-crore Salem steel plant on the occasion of the commissioning of the project's first stage. At a simple function, Mr A. S. Gill, secretary to the Department of Steel Ministry pressed a button and commissioned the Sendzimir mill, the kingpin of the cold rolling mill complex. Earlier Mr K. C. Khanna, chairman of Steel Authority of India, opened the main works entry to the plant. At the ceremony the first consignment of 950 kg of rolled sheets was despatched to a consumer.

Salem Steel Ltd in its first phase will manufacture 32,000 tonnes of stainless steel coils and sheets with thickness ranging between 0.3 millimetres and four mm and width up to 1,250 mm. Stainless steel finds numerous application, from an injection needle to an atomic reactor vessel and is resistant to rusting and corrosion.

The sixth steel plant of the Steel Authority of India (SAIL) to go into production since independence the Salem steel project's first stage which was cleared by the Government of India on March 13, 1977 has been completed and commissioned within 54 months as scheduled.

It was in 1970 that the Prime Minister, Mrs Indira Gandhi, announced in the Lok Sabha the Union Government's decision to set up three steel plants in the country at Visakhapatnam in Andhra Pradesh, Salem in Tamil Nadu and Vijayanagar in Karnataka. In 1972, based on a first feasibility report, the Government made an investment decision to establish at Salem an integrated special steels plant for the manufacture of stainless steel, electrical steel and other special steel sheets and strips. The late Mohan Kumaramangalam, the then minister for steel and mines, inaugurated the construction work at the site on June 30. However, due to several factors, including paucity of funds, little progress was made in the work. However, after the Government announced its approval of the first stage of the project to produce 32,000 tonnes of cold rolled stainless steel coils and sheets using imported hot bands, there was no let-up in the activities. The detailed project report for the project was prepared by Dastur and Company Pvt Ltd who were also entrusted with the job of project engineering. Hindustan Steel Works Construction Ltd, a public sector construction agency, performed the civil and structural work.

Salem steel plant uses a sophisticated technology of high speed cold rolling of stainless steel coils and sheets so far not adopted in India. Technical know-how for the plant is obtained from Peugeot Loire of France, the well-known automobile and steel manufacturers. The two three hundred metre long annealing and pickling lines adopting neutral electrolyte pickling process have been supplied by Dujandin Montband Somenon (DMS) of France in association with Drever International AL Belgium and Ruthner of Austria. Electrical equipment are supplied by BHEL. The 20 feet high Sendzimir Mill (ZR 22 B 52) was manufactured by Hitachi and supplied by Nissho Iwai of Japan. The coil build up line and strip grindling line have been supplied by Sundwig of West Germany and Heavy Engineering Corporation of Ranchi. The skinpass mill is supplied by Mecon, Ranchi in collaboration with Wean United of the US and was manufactured by Garden Reach Workshops at Calcutta. A number of other public sector com-

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panies have been associated with the manufacture and supply of equipment valued in all Rs 87 crores.

While the present Sendzimir mills production capacity is only 32,000 tonnes per day, the Government is considering a proposal to instal another Sendzimir mill's and associated facilities at an additional investment of Rs 30 crores. This would double the capacity of the plant and improve its economics.

Presently the hot bands which are the input material for Salem steel are being imported. A scheme to manufacture by continuous casting process stainless steel slabs at the Durgapur allloy steels plant and roll them at Bokaro steel plant hot rolling mills has been approved by Government. When this is achieved considerable saving of foreign exchange will be effected. Doubts have been expressed in certain quarters that the Salem steel plant will be limited to its present scope, namely, cold rolling and may not be developed as an integrated steel complex as originally envisaged. Mr A. S. Gill has tried to allay such an apprehension by saying that, though the investment decision covered only the cold rolling complex, there were possibilities of further development though he did not categorically assure that the project would blossom into an integrated one. Mr Khanna told a news conference that SAIL had approached the Government to reduce the burden of customs duty on imported hot stainless steel band and also import of finished rolled projects in order to make the Salem plant viable.

Total land acquired for the Salem steel plant is 15.45 square km of which 3.25 sq km have been earmarked for the township. The plant is linked with Salem railway junction by a 8.6 km broad gauge line. Water supply to the plant is drawn from the Cauvery 28 km away. Energy requirements of the plant will be 34 million units per annum.

It is rather strange that the Salem steel plant is not using iron ore available in nearby Kanjamalai region. Estimated reserves of ore in Tamil Nadu have been placed at 800 million tonnes, including 240 million tonnes in Kanjamalai region. The ore is of magnetite type with ferrous plant content of 30 to 45 per cent. It was first considered that economic mining could be carried out with annual concentrate of 0.8 million tonnes per annum.

Mr Khanna has stated that it might be possible for the Salem steel plant to use the Kudremukh iron ore concentrates. But this could depend on an in-depth study and policy decision by Government, he added.

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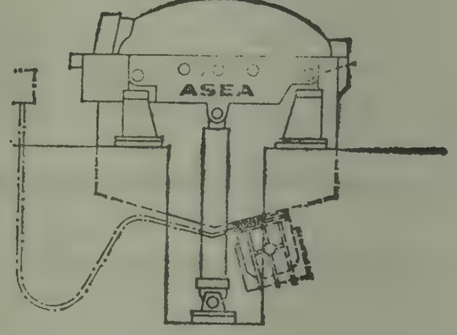

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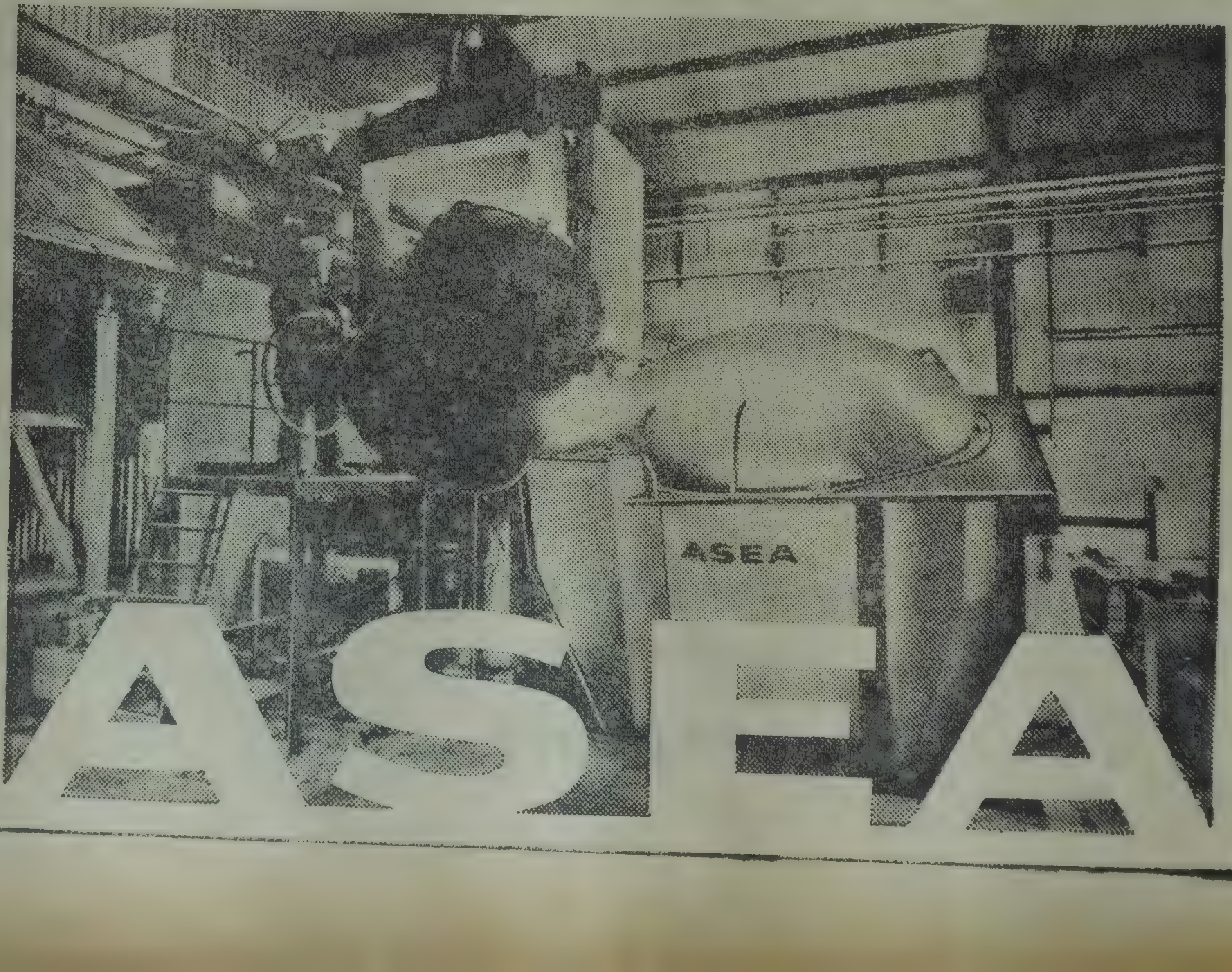

SPECIAL ARTICLE

Modernisation of foundry industry

By A SPECIAL CORRESPONDENT

FOR rapid economic growth, heavy investment would have to be made in many of the key sectors of economy and a heavy burden would again fall on the foundry industry which is the basic input for any industry. Iron foundries especially will have to bear substantial share of the responsibility in order to meet the aspirations from all quarters.

Problems with power and availability of other essential inputs such as pig iron, coke, etc, would continue for some more time. This is only a passing phase which any developing economy would experience. Very soon improvements in production and distribution facilities will be made in these fields and it is then the iron foundry industry should be ready to meet the growing demands of castings at reasonable prices. It is here the writer feels that modernisation of iron foundries would be an urgent need.

Modernisation is a very wide term and generally the scope could cover the following : (i) providing better working environment to foundry personnel; (ii) better productivity from foundries; (iii) better yields and lower cost of production; and (iv) better quality of castings, *i.e.* lower rejects.

To achieve all this, an all round improvement in our metal production, moulding technique and pouring technique will have to be made. The purpose of this article is, therefore, to highlight the importance of augmenting the metal production and introduction of automatic pouring. The latter could be frowned upon by authorities in power especially in a developing economy but it is to be accepted that it is much better to provide better working environment to our foundry men rather than exposing them to dust, fumes and high temperatures which generally prevail in all foundries.

Taking first the point on augmenting the metal production, it is widely known that there are furnaces to produce molten iron and moulding lines to convert them into castings. The melting furnaces could be either electric melting furnaces (arc and induction type) or cupola. The furnaces have a certain melting capacity in tonnes/hour. Similarly, the moulding lines also have a certain capacity for production of castings in tonnes/hour. The best one could achieve from a foundry theoretically is the lower of the two. This would naturally assume that there would be no operational, maintenance or raw material problems. However, this is not the case in any industrial activity and this partly answers the reason why our production levels are far too lower than the installed capacity. This situation can be simply explained as follows.

In the event of a problem with the melting furnace, no metal would be produced and thus available for producing castings. Similarly, if there should be a problem with the moulding line, the melting furnace has to be necessarily stopped due to lack of storage capacity. It is here stress on the importance of a storage vessel (only in iron foundries), which when available, the operation in the foundry would be more or less independent of the availability of metal from the melting furnace. Such a storage capacity built with a heating device is called a Holding furnace or Channel furnace.

The Channel furnace, to briefly say is a well insulated vessel to hold liquid iron to which is attached a heating unit called ***inductor.*** In other words it is a reservoir for holding liquid iron which is placed between the melting furnace and the moulding line. As explained earlier, such a furnace if installed would ensure continued operation of the moulding line.

While discussing this subject, it would be interesting to go over the history of Channel furnaces. The first Channel furnace for industrial purpose was designed and built in the beginning of this century by a Swedish Engineer, Fredrick Kjellin. The furnace was installed at Gysinge Bruk, a small steel works in Sweden. This furnace had a charging capacity of 1300-1800 kg of steel and consisted of horizontal vessel. The furnace was fed by a specially designed single phase generator with rated power of approximately 300 kw, 15 Hz. This furnace was no great success mainly due to lining problems. The melting of ferrous material was then abandoned and instead non-ferrous was taken up where lining problems were easier to solve. When continuing the development of Channel furnaces the aim was to increase the power input. The pioneers found the so called 'Pinch effect', a phenomenon which constricts the melt in the Channel and interrupts the current circuit when the current reaches a certain value. Further work was taken up by an American furnace designer, James Wyalt which culminated in the Channel furnace of today. Higher static pressure of the melt on the Channel counteracted the pinch effect and this also paved the way for increasing the inductor power.

Towards the end of fifties, considerable improvements were introduced in the furnace design *e.g.* the tea pot spouts for charging and tapping of the iron. This in combination with the new lining techniques developed, made it possible to start considering the ferrous field again.

The Channel of today is a vertically placed cylinder duly built to accept liquid iron. The heating unit is the *inductor* mounted at the bottom of the vertical cylinder. The liquid metal is allowed to pass through a loop which is surrounded by a coil fed by power. In short the inductor is a short circuited transformer where the loop of metal acts as secondary. The loop of metal is thus heated and the forces created by the current results in a jet flow of metal from the loop and together with the normal convection process hot metal is displaced by cold metal. Thus the entire metal is gradually brought to higher temperature.

Basically a Channel furnace aims at holding the metal temperature to the desired value. Superheating of the metal specially from a cupola is an added application. A recent development in this field is to be able to melt additions of scrap or ferro alloys apart from its accepted role. As stated earlier, the constraint in this was the development of high power inductors as melting would call for higher energy inputs. Both in Europe and the United States inductors of power ratings up to 2,500 kw have already been developed and are known to be in operation. Such a furnace for both melting and holding of iron, offers a great promise for reduced energy consumption and poses a threat to crucible type melting furnaces.

While discussing this, it is also worth mentioning the reason why a crucible furnace is not generally considered useful for holding application. Channel furnace being a sealed furnace very low holding power would be necessary. For example 40 tonnes of liquid metal can be held at say 1.400°C with around 200 kw power in a Channel furnace whereas this power would be required for holding less than half this metal in a crucible furnace.

The advantages of installing a Channel furnace in an iron foundry could be summarised as under :

- A Channel furnace would assist in holding and super-heating of metal. The super-heating facility would specially be advantageous while duplexing iron from a cupola.
- When a holding furnace is available in a foundry, pouring could continue even when the melting furnaces are down.
- When a holding furnace is available in a foundry melting could proceed even if the moulding lines are down.
- Due to the above mentioned two points, the production level could be boosted up substantially which might be welcome when a foundry is operating at a level generally considered as a limit. Thus there is a possibility to increase production at marginal investment.
- With a holding furnace, it is possible to pour at more or less uniform temperatures as super-heating to the desired level is easily possible. Thus the nuclei are not destroyed as holding could be carried out at desired temperatures. The castability of the iron is thus substantially improved in foundries which did not have access to well pre-heated iron earlier.
- Losses due to burning in a Channel furnace are relatively insignificant. This is because a Channel furnace is a sealed furnace.
- Analysis can be easily adjusted and with a Channel furnace the control which one has to exercise in achieving the composition of each melt will not be then required. Variations in analysis from each melt may not be felt when it is mixed with the molten iron in a Channel furnace. This is because of the comparative large volume of metal in the Channel furnace. This variation could also be adjusted when the next charge is made in the melting furnace, if required.
- Bigger castings could be made which, otherwise may be limited by the availability of metal from the melting furnace.
- Channel furnace being a sealed furnace, the losses are at a minimum. For example, a 30 tonne useful capacity holding furnace would have a holding power of around 200 kw. Whereas under similar situations one could require much larger holding power in a crucible type melting furnace.

An off shoot of the Channel fur- e philosophy has been now applied automatic pouring of iron into ulds. This pouring furnace is basically hannel furnace and is placed over the moulding line. Pressure is applied on the metal surface which allows the metal to rise in the pouring chamber and the flow into the moulds can further be controlled by stopper rod.

The aim at improving working condition, reducing cost and improving quality has apparently prompted development of this application. The main functions of a pouring furnace are : serving as a buffer store for metal at pouring stations; keeping the right pouring temperature and even out temperature variations from the melt shop; to even out analysis variations; separating slag from the liquid iron; controlling the pouring speed; giving accuracy of the pouring weight; and reducing man power.

All these factors contribute to advantages namely : higher utilisation of melting plant and moulding line; reduced rejections; improved quality of castings; and higher yield.

Pressure pouring furnace is an useful tool in automatic pouring and the advantages of this are very obvious.

As both Channel furnaces for holding iron and pressure pouring furnaces are based on same philosophy, the lining materials used on these furnaces are almost identical.

Generally speaking holding furnaces did arouse a good deal of interest the world over since their introduction over two decades ago. The pressure pouring furnaces also received almost the same response, but, however, this is more recent, having been introduced into the market about ten years ago. Channel furnaces did go through early frustration and most of the problems were mainly attributed to non-availability of suitable lining materials, specially to line the inductor. But today, this problem has been overcome due to development of suitable lining materials and this is one of the reasons which prompted the development of pressure pouring or introduction of automatic pouring. Lining life of two to three years on *VAT* and six to eighteen months on inductor have already been achieved and it is this long lining life which makes these furnaces more viable to the industry.

The Indian foundries were watching the development and did not introduce holding and this could be partly attributed to their low utilisation and also due to the fears generated from early experiences in Europe.

Normal considerations while choosing lining materials are : (i) Basicity of the slag and the FeO + MnO content; (ii) Holding temperature; and (iii) Analysis of iron.

Both basic and neutral lining are chosen for Channel furnace. The inductor lining can, however, be chosen more independently of the slag conditions. A common factor for inductor lining is a very small content of impurities and proper grain distribution to mininise porosity.

Lining materials for Channel furnace application could be developed within the country and it is only necessary for the local lining suppliers to gain experience before their performance could match with the ones from abroad.

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A NEW international award for energy sponsored by Mr Ambrose Congreve, chairman of Humphreys & Glasgow Ltd, has been announced. The award will be given for a paper or essay in English covering a research project, process, invention, design evaluation or any other work dealing with some aspect or method of conserving our oil and natural gas resources; the exploitation of alternative energy sources or with improved methods of energy utilisation.

The award will be divided into two sections, the first concerned with fossil fuels (oil, coal, oil shale, etc) and the second with other energy sources (nuclear, biomass, solar, tide, wave, wind, geo-thermal, etc).

The judges will take into consideration the relevance of the entry to the needs and conditions of the country from which it originates.

Technical or economic reviews as such will not be acceptable.

The adjudicating panel will consist of :

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Professor Ian Fella, Professor of Energy Conservation, University of Newcastle upon Tyne.

Dr J. L. J. Rosenfeld, Shell Research Ltd, Chester.

The award

The award in each of the two sections will consist of £1,000 and a certificate. In the event of a tie in either or both sections, the prize money will be equally divided between the joint winners.

Entry forms and rules may be had from Humphreys & Glasgow Ltd, at 22 Carlisle Place, London, SW1P 1JA. For further information contact Humphreys & Glasgow Consultants Pvt Ltd at Gamma House, Savarkar Marg, Prabhadevi, Bombay 400 025.

STATE LOANS

Rising share of market borrowings in Plan finance

By JITENDRA H. SANGHVI

THE response to the state governments' loans floated on September 1, 1981 was overwhelming in that against the notified amount of Rs 475.25 crores the actual subscription received amounted to Rs 696.19 crores. Thus, the loans were not only fully subscribed but oversubscribed to such an extent that even after exercising their right to retain subscriptions up to 10 per cent in excess of the notified amount, as many as 10 states, namely, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal were able to make only partial allotment to the applicants. Thanks to the good response, last year also all these state governments (except Tamil Nadu) had to resort to partial allotment.

In this first tranche of market borrowing programme by the state governments during 1981-82 all the state governments, except Meghalaya and Sikkim, participated. The noteworthy feature of this year's loans was that while the maturity period at 12 years remained the same as that for the last year's loans, the coupon rate was increased from 6.75 per cent last year to 7.0 per cent this year. This was in keeping with the general escalation in the interest rate structure in the country. All the loans would be redeemable at par after 10 years *i.e.* in 1993. The statewise details of notified subscription and actual allotment are given in the accompanying table.

With the retaining of 10 per cent excess subscription, the gross subscription would amount to Rs 503 crores (Rs 457.25 crores + Rs 45.73 crores). Taking into account Rs 170.57 crores by way of maturing loans of 15 state governments, total net subscription would amount to nearly Rs 332 crores. In September 1980, 21 state governments (all except Sikkim) had floated loans worth Rs 299.75 crores and attracted the actual subscription of Rs 397.97 crores.

Good response from the banks to the recent state loans was partly on account of the hike to be effected in their statutory liquidity ratio from 34 per cent to 34.5 per cent from September 25 and further to 35 per cent from October 30. Following the RBI's decision banks were obliged to evaluate their entire investment portfolio at current market prices rather than a part being evaluated at book value earlier. As a result of higher return available on new loans, prices of some of the old securities have declined to levels lower than their book value. This also would have resulted in more demand for these securities by the banks.

The Annual Plan outlay of the state governments for 1981-82 is placed at Rs 8,471 crores. As regards the financing of this outlay state governments would raise their own resources of Rs 5,471 crores (including Rs 752 crores of additional resource mobilisation) and the Central Government would extend an assistance of Rs 3,000 crores. State governments are expected to raise Rs 782 crores by way of market borrowings during the current financial year. This would form 14.3 per cent of their own resources as compared with 12.6 per cent in 1980-81.

On the face of it this may look quite impressive. But those familiar with the Indian economy need not be told that market borrowing in the Indian

State Government loans

State	Rs crores		
	Notified amount	Actual subscription received	Of which by way of conversion
I. Subscribers Receiving Full Allotment			
Andhra Pradesh	52.00	57 34	6 06
Assam	11 50	12 74	3.75
Bihar	25 50	28 13	4 59
Haryana	14.00	15.43	2.93
Kerala	24.00	26.45	3.65
Orissa	23.75	26.13	3.89
Rajasthan	38.00	41.82	5.27
Manipur	2.75	3.05	—
Nagaland	3.75	4.16	—
Tripura	2.75	3.03	—
II. Subscribers Receiving Partial Allotment*			
Gujarat	29.00	65.57 (43)	7.45
Himachal Pradesh	1.75	3.94 (49)	—
Jammu & Kashmir	2.75	4.70 (65)	—
Karnataka	22.75	44.89 (53)	3.23
Madhya Pradesh	17.25	33.66 (48)	5.43
Maharashtra	35.25	83.63 (40)	9.97
Punjab	12.25	30.51 (39)	2.86
Tamil Nadu	34.50	53.49 (66)	8.44
Uttar Pradesh	84.00	107.19 (85)	8.88
West Bengal	19.75	50.33 (35)	6.68
Total	457.25	696.19	83.08

* Oversubscribed beyond the 10 per cent limit. Allotment for cash subscription over Rs. 10.000 would be made at the percentage indicated in bracket.

Mr Sanghvi is Assistant Director in the Commerce Research Bureau.

context is a misnomer and by and large represents deficits financing only. Unfortunately, resort to market borrowing has been taken to finance a rising proportion of Plan outlay in recent years. The ratio of market borrowing by the Central and state governments was fairly steady at 10-12 per cent of the total Plan outlay until 1968-69. This ratio went up to 17.6 per cent in the Fourth Plan (1969-70 to 1973-74) to decline to 15.9 per cent in the Fifth Plan (1974-75 to 1977-78) but again to rise to 18.6 per cent in 1978-79 and to 19.8 per cent in 1979-80. In the Sixth Five Year Plan (1980-85) market borrowings of the order of Rs 19,500 crores are expected to finance the public sector Plan outlay of Rs 97,500 crores. In other words, market borrowings would finance 20 per cent of the Plan outlay —the highest ever.

Difficult phase for plantations

COONOOR

THE 88th annual conference of the United Planters' Association of Southern India (UPASI) met at Coonoor last week at a time when the Indian planting industry is passing through a difficult phase. Most plantation crops face a crisis. Market realisations for tea are well below production costs. The recent frost in Brazil may have bailed out the coffee industry out of disaster but plantation circles are far from convinced that the market improvement will continue for long. Growing global competition has put a brake on the euphoria in cardamom and the industry is barely able to keep its head above water.

Speaking on the occasion, Mr R. N. Deogun, president, UPASI, said the terms of trade have deteriorated to the level where many estates were no longer viable and face closure with the attendant implication of large scale labour retrenchment. In stating that the fate of the plantation sector now lay in the realm of public policy, he welcomed the convening of the recent national meet on tea, which sought to analyse the current crisis and recommend ameliorative measures. He expressed the hope that the meet represented the first step on the long haul back to viability.

Mr Deogun dwelt on the infrastructural malaise and burden of adverse policy measures particularly in the area of taxation which constrained the growth and development of plantations. For example, plantations contributed 90 per cent of collections under agricultural income tax and over 75 per cent of the export duty accruals, besides being the only sector paying wealth tax. In fact plantations paid the highest percentage of total taxation in the entire corporate sector in the country.

Mr Deogun also questioned some public policies which, he said, militated against development objectives. He cited the denial of crucial land for growing wood fuel needed by plantations at a time when coal had to be transported at a great cost from distant areas and petroleum-based fuels have skyrocketed in price. Such instances of discrimination, he said, could also be found in energy pricing, credit programming and selection of the industry representatives for nomination on commodity boards as well as "in the arbitrariness of state governments in labour management relations."

Mr Deogun felt that positive policies and provision of proper environment for growth and development could help considerably in putting the industry back on its feet. Growth in the plantation sector was crucial for the country's economy because plantations played a vital role in several areas like land use, employment generation and foreign exchange earnings. In contrast to subsistence farming in field crops, plantations had evolved scientific cultivation and management practices, which enabled them to generate considerable resources from a small land base totalling a mere 0.5 per cent of the country's cultivable land. He mentioned that a hectare of tea generated seven times the employment in paddy cultivation. This employment in the plantation sector guarantees minimum needs and a welfare package unequalled anywhere in the corporate sector. This fact was crucial since over 305 million of our rural population lived in poverty and over 35 million were unemployed. "Agriculture holds the key to future growth and it should be treated as an employment generation rather than employment releasing sector and plantations have a lesson to offer in this direction."

Mr Deogun outlined the impressive record of growth and development of the plantation sector which had registered the highest growth rates in agriculture over the past 15 years. Plantations were the only sector in agriculture where a situation of abundance existed. During the last 15 years the annual increase in production was 13.5 per cent in rubber, 9.8 per cent in coffee, seven per cent in cardamom, and 3.8 per cent

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Sept. 11, 1981 over		
		Sept. 11, 1981	Sept. 4, 1981	Aug. 14, 1981	Sept. 12, 1980	A week ago	A month ago	A year ago
Rice	Average	3.60	3.60	3.60	2.80	—	—	28.6
Wheat	Average	3.50	3.50	3.50	2.80	—	—	25.0
Jowar	Average	2.30	2.30	2.30	2.00	—	—	15.0
Bajra	Average	2.30	2.30	2.30	2.00	—	—	15.0
Gram dal	Average	6.50	6.50	6.50	6.00	—	—	8.3
Tur da'	Average	6.80	6.80	6.80	5.60	—	—	21.4
Potatoes	Average	2.00	2.20	2.40	3.00	—9.1	—16.7	—33.3
Onions	Average	1.60	1.80	1.80	1.00	—11.1	—11.1	60.0
Milk per litre	Buffalo	6.00	6.00	6.60	4.40	—	—9.1	36 4
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre ..	—	1.66	1.66	1.66	1.39	—	—	19.4
Bread (400 grams) ..	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	6.00	6.00	6.80	13.50	3.4	—11.8	—55.6
Gur	Average	6.60	6.60	6.60	7.00	—	—	—5.7
Groundnut oil	Average	16.00	16.00	18.00	11.50	—	—11.1	39.1
Vanaspati	Average	15.00	15.00	17.00	—	—	—11.8	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book (200 pages)	—	2.50	2.50	2.50	—	—	—	—

in tea as against an actual fall of 0.3 per cent in groundnut and marginal increases of 0.6 per cent in jute, 0.3 per cent in sugarcane and 1.5 per cent in foodgrains. The Sixth Plan targets for plantation aim at an annual growth rate of eight per cent for rubber, seven per cent for coffee, five per cent for tea and 4.5 per cent in cardamom. These could not be achieved unless a healthy environment is created. There was also need for a national labour policy to foster healthy collective bargaining free from coercion violence and intimidation.

Maldistribution of cement

BOMBAY

IT was with a view to checking the flourishing blackmarket in cement that the Government had introduced a new system of cement distribution from October 1, 1978. It empowered the states to completely take over the task of distribution against permits. However, this policy has not only aggravated cement shortages but also led to maldistribution of cement and pushed the blackmarket prices to unprecedented levels. As against the controlled price of Rs 20 before October 1, 1978, cement was then selling at a premium of Rs 20 per bag, whereas now, the commodity is being offered at a premium of Rs 70, as against the official price of Rs 30. In some places it has even been bought for as high a price as Rs 150 per bag.

In fact, the Cement Stockists and Dealers Association of Bombay has pointed out that the public sale quota has fallen drastically under the new distribution policy. In the last quarter of 1978 (October-December 1978) the quota for Bombay alone amounted to 5,30,000 tonnes. Today it is only 21,670 tonnes per quarter.

Explaining the current distribution scheme for cement, Mr S. U. Ladiwala, president of the Cement Stockists and Dealers Association of Bombay, said that prior to its introduction, only 25 per cent of the material allotted for public sale was against permits, while 75 per cent was for free sale. However, at present 100 per cent of cement distribution is against permits.

Another change was the introduction of the co-operative sector in the field of cement distribution. About 50 per cent of cement is now distributed through consumer and marketing co-operatives while the balance is distributed through the private sector.

Prior to October 1978, stockists were representatives of various manufacturers and were allotted quotas for distribution by the manufacturers. But now they are delinked from their manufacturers and receive allotments from the Government. Quotas are now fixed for stockists based on their past performance.

Mr Ladiwala said, under the new other categories of consumers—the government departments, rate contract parties and others who have representatives on the high power committee (appointed by the Government to formulate and make changes in the distribution system) were being allotted bigger quotas at the expense of the public sale quota.

Though the distribution scheme does not make any provision for cement allotments directly to consumers, the Government makes *ad hoc* allotments directly to consumers. This possibly meant that some consumers got allotments both at the regional level and directly from the Government. Huge stocks, therefore, lay unused with certain consumers. Moreover, the State Government, which received approximately 45,000 tonnes of *ad hoc* allotments per quarter, lost approximately Rs 2 crores per annum on direct sales, which it would have realised from sales tax if the sales were completed within Maharashtra.

Referring to huge accumulation in silo stocks due to delays in cement distribution, Mr Ladiwala said, manufacturers had to sometimes cut down production for lack of storage space. The government had also to resort to lifting of silo stocks by road transport, which was expensive and a national waste. This resulted in added costs for the consumer, higher costs of construction leading to higher costs of accommodation. The delinking of stockists from manufacturers had resulted in further delays in despatch of materials and inconvenience to the consumer. Formerly, stockists who had built up commercial relations with their manufacturers were often able to get materials on credit. Now manufacturers have to wait for payment before they can despatch the material.

Mr Ladiwala believed that the co-operative sector had aggravated the situation because many co-operatives were not able to obtain physically the material allotted to them. This material lapses at the end of the quarter and the state loses that much quota. According to Mr Ladiwala, cement distribution is not a remunerative business. The gross margin to the stockists in the cement trade works out to about 7.51 per cent on investment and the net margin after deducting incidentals like transportation and handling charges works out to about 1.9 per cent on investment.

Mr Ladiwala complained that fixation of quotas for stockists had been done on an arbitrary basis. His association has made appeals to the Government to distribute *ad hoc* quotas through stockists who have got the capacity to handle larger quantities. He also alleged that the high power committee formed for regulating policy was ineffec-

Mr B. D. Pande

MR B. D. Pande, the newly appointed Governor of West Bengal, is a civil servant of wide experience. He was Union Cabinet Secretary and Principal Secretary to the Planning Commission till March 1977 before retiring from the Indian Civil Service, which he had joined as early as 1938. For two years from 1963 he was the chairman of the Life Insurance Corporation of India before moving to Bihar as Commissioner-General cum Chief Secretary in 1967. He had served earlier in Bihar for 21 long years. He returned to the Centre soon after and till early 1970 was Secretary in the Department of Heavy Engineering.

Mr Pande headed the National Transport Policy Committee set up by the Planning Commission which produced a comprehensive and brilliant report about the co-ordination of transport services and later he was nominated Chairman of the Railway Reforms Committee.

tual in its working. Moreover, though the distribution of cement was supposed to be fully controlled, a free market for cement was still in existence with prices averaging between Rs 80 to Rs 140 per bag. In the past, free market rates had not crossed Rs 45 per bag and averaged between Rs 35 to Rs 38 per bag.

The association has, therefore, suggested some remedial measures to improve the current system of cement distribution. It has recommended that the public sale quota for the state be reinstated to the levels existing before October 1978, which is, approximately 100,000 tonnes per quarter. A review of the co-operative sector should be undertaken. Stockists should be linked with their manufacturers. Bureaucratic procedures for the issue of material from the point of allotment to the issue of permits should be streamlined. The State Government should take up with the Central Government the issue of the validity period for allotments. The public sale quota allotted should be valid for a period of three months from the date of issue and stocks which are received by the stockists should be liquidated within a fortnight from the date of receipt. The previous system of 75 per cent freesale and 25 per cent under control should be again introduced. A dual system of pricing could also be tried, in which about 25 to 40 per cent of cement is controlled, while the rest is for free sale.

Money

Accounting system of banks

THE RBI study group on the accounting systems of banks has four major tasks before it. Its objectives are to simplify the accounting system, to make it efficient and effective and to generate operational, statistical, statutory control and management information on business and priority sector lending of banks.

In order to achieve these objectives, the study group will first have to have a look at the accounting and the balancing systems of banks at the branches, and consolidation systems at the regional, zonal, or other control offices and at central office.

The major and difficult problems here are three. The general ledgers of branches have grown so large as to have nearly 150 accounting heads, all of which are not required for daily, weekly or monthly purposes. Second there are nearly 100 other types of priority sector lending on which weekly reports are required, but they do not find a place in the general ledger. And finally, the entire system of recording transactions and accounting them is based on scrutinywise analysis of the lending portfolios and schemewise analysis of the deposit structure, but the entire information and reporting requirements are based on a purposewise analysis of the lending portfolios. The result of these divergences is that the strains on the accounting and the balancing systems are much larger. The strains mean that the accounts are not written or balanced for days together and are not tallied for months together.

The second range of problems arises because the information system in banks is separate from the accounting system. It has been the experience of banks themselves that the statements and returns come with seriousness and regularity where information flows as a by-product of accounting. Such instances are rare in banks, but important. Bankers complain of Section 42(2) return not coming in time, but it still comes in more regularly than the priority sector returns. Thus the answer to delays in returns is to so arrange the accounting system as to ensure that information follows as a by-product of accounting.

The third range of problems is the reporting of a wide variety of same information on priority sectors in different formats at different times. Every authority, within the bank or without wants the same information in its own format and it has to be sent again and again separately, once the format changes. It is this multiplicity of reporting requirements that cause unnecessary work burdens on the branches and lead to a loss of credibility of the top management in the eyes of the branches. They seem to think, sometimes with great justification that nobody makes any use of the huge mass of data branches send again and again. The answer to these problems lie in devising a system of master return and updating it from time to time. Further still, it is necessary to ensure that all the data required are in the general ledgers or the subsidiary general ledgers.

Finally, there is the growth area of standardisation of accounting concepts and definitions. Standardisation is essential to an industry—and if there is no standardisation, there would be no comparability or progress. Bankers face these problems in lack of comparability of their accounts of deposits, provisions, other liabilities and assets, tax deductions and many other similar headings. The simplest but the most essential task before the RBI study group is therefore to ensure that all concepts that change the performance of the bank should be standardised to make them comparable. If this is done, there will be real measures of progress, otherwise banks will be competing with each other to show better performance not by doing better work but by using different (not necessarily better) techniques of presentation.

S. G. Shah

EDIBLE OILS

Poor supply management

BOMBAY

THE high prices and low availability of edible oils is clear proof of the failure of government policy in canalising imports of this essential commodity through a single monolithic agency and depending on a grossly inadequate distribution machinery, said Mr Tulsidas Tanna, chairman of the Oils and Seeds Importers Association of India (OSIA), at the association's third annual general meeting. Oil prices had touched their all-time peak levels with groundnut oil leading others at over Rs 16,000 per tonne. This was despite massive imports of over a million tonnes of oil through the State Trading Corporation of India (STC).

Mr Tanna attributed the present grave situation to poor supply management. The volume of imports in 1977 and 1978 when imports were freely

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allowed was more or less the same as at present, but availability and prices then were excellent. There was a natural rise of 4 to 5 per cent in demand for oils every year with no corresponding increase in supply of both indigenous and imported oils. The need to efficiently manage available supplies, therefore, was all the more important.

Describing the public distribution scheme for edible oils launched in 1979 as over-ambitious, Mr Tanna said, it did not help feed consumers. The association had, therefore, suggested to the Government that private trade channels also be used for the import and distribution of edible oil, at least till the public distribution system was large enough to cover the majority of the population. The present situation demanded a system of distribution which not only encompassed the whole country but was also agile and flexible enough to expeditiously arrange for the timely supply of oil to every part of the country.

Prices tended to fall when imports were made by private trade. Till recently, Mr Tanna said, many members were importing various oils like cottonseed oil and coconut oil for refining and for human consumption. These oils had augmented availability in the market and checked rising prices. Coconut oil, for example, was always priced at least Rs 2,000 per tonne higher than the groundnut oil. Its price receded with the recent import of about 40,000 tonnes of coconut oil on private account. It is now quoted Rs 3,000 below the price of groundnut oil. He commented on the fact that imports of a meagre 40,000 tonnes on private account had made an impact on the market, while imports of a million tonnes by the STC had made no dent on the market.

Mr Tanna was also critical of the high rate of customs duty on imports of vegetable oil by the private trade, making such imports uneconomical. This needlessly penalised the consumers. He felt the Government needed to strike a balance between the interests of farmers and consumers. If prices were unduly depressed, farmers were denied a remunerative return for their produce. On the other hand, consumer interests remained unprotected, by curbing imports through the levy of high rates of duty. The Government would have to decide the price level at which both farmers and consumers would be reasonably benefited.

As a long term strategy, it was necessary to lay emphasis on increasing oilseed production and the Government had allocated substantial funds for the development of oilseeds, especially groundnuts. But, Mr Tanna felt the Government would be well advised

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As I see it

Perspective on primary education

EDUCATION has an integral role in the economic development of a country. With the exception of the United Kingdom, where Industrial Revolution had originated, in every other developed country industrialisation was preceded by a massive drive for education. Unfortunately, 34 years after independence the country is burdened with a very much large mass of illiteracy than in 1947. There are an estimated 50 million children outside the school in the age group 6-14. The states, where primary education has fallen particularly behind are West Bengal, Andhra Pradesh, Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan. The goal of the universalisation of elementary education is still far away. Despite this gap successive five year plans have accorded a reduced importance to elementary education in the matter of financial allocation considered against the total plan outlay.

As a proportion of total plan outlay, the outlay on elementary education declined—from 58 per cent in the First Plan to 32 per cent in the Fifth Plan. No doubt the investment made in each Plan becomes the background or infrastructure on which the programmes in the subsequent Plan can be worked out. Nevertheless the backlog of illiteracy in the country calls for accelerated efforts. Considering all aspects the Working Group on Education suggested an outlay of Rs 1,700 crores on elementary education for the Sixth Plan. But this has been reduced to Rs 905 crores.

The Working Group on Education suggested the fulfilment of the target of universalisation of primary education during the period of the Sixth Plan. The current target is to achieve 95 per cent enrolment. For full enrolment of the children in the age group 6-14 years it would require another five year plan, according to the present stipulation. The target is further to secure 50 per cent enrolment in the middle level during the Sixth Plan and another fifty per cent enrolment in the succeeding Plan. Apparently in many states the enrolment ratio was not going up and that after a level had been reached the curve no longer went up. Consequently even after 20 years from now 20 per cent of the children in the age group 6-14 would remain outside the school system, if the broader sociological aspects are not tackled right now.

The current teacher-pupil ratio is 1:41 in the primary classes and 1:25 to 35 in the middle school classes. In the case of higher education the ratio is 1:30 to 35. In another twenty years it would be necessary to cover about 20 crore children by the system of elementary education. This, in turn, would call for the employment of an adequate number of teachers and the financial resources to support them. The Public Accounts Committee (1980-81) of the Lok Sabha has suggested that the services of the unemployed youth should be obtained to tackle the problem of illiteracy. "The youth who volunteer to work in this field should be given a modest remuneration and also some priority in the matter of obtaining a regular job," the Committee says. The problem of teaching science to the primary students calls for a special consideration, since at the primary stage nearly 1.55 lakh science teachers teaching science *had not even studied* the subject.

Education of the children of scheduled tribes living in sparsely populated areas presents special problems. Ashram schools (providing free residence, board and all other educational expenses) set up in the states in several cases do not have an adequate number of students. For example 291 ashram schools in Andhra Pradesh had 17,267 students in 1976-77—less than sixty per school; 138 schools in MP had only 5,520 students.

Subhash Chandra Sarker

to give consideration to certain short-term measures for overcoming the present edible oil crisis. The Government should enlist the services of the private trade and industry in the import and distribution of edible oil. The Government, he said, should allow import of oils against additional licences held by export houses. It was also important to increase the volume of agricultural produce exports, especially certain value-added items like HPS groundnuts.

He suggested a scheme whereby the STC could begin high-seas sales of imported oils to private parties. Alternatively, STC's import contracts could be transferred to private parties against surrender of specified licences. The STC could recover the cost of goods plus some nominal service fees. The OSIA was in a position to place indents with the STC on behalf of its members and also to monitor the effective implementation of the scheme. The success of the above schemes in bringing down edible oil prices to a reasonable level would depend on suitable adjustments by the Government in the import duty structure, he said.

Remarking that STC's imports of edible oils for ready consumption at the cost of local processing industries was strange, he said, every importing country in the world imported raw materials for processing at home as far as possible. To conserve foreign exchange and use the vast idle crushing capacities in the country, Mr Tanna recommended imports of oilseeds like rapeseed and sunflower seeds.

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	Aug. 22 1981	Aug, 15 1981	July 25 1981	Aug. 23 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	277.2	276.4	274.1	264.3	0.3	1.1	4.9	28.2
Primary articles	273 5	272.6	270 5	236 1	0.3	1.1	15.8	29.9
Fuel, power, lubricants etc.	437 5	428.8	428 7	355.7	2.0	2.1	23.0	46.9
All commodities	289.2	287.7	285.7	260.3	0.5	1.2	11.1	31.0

Money and Banking (Rs crores)

	During the week ended				Percentage variation			
	Aug. 28 1981	Aug. 21 1981	July 31 1981	Aug. 29 1981	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,082	58,097	58,563	49,264	—	—0.8	17.9	33.7
Bank credit	26,791	26,622	26,779	21,968	—0.1	—	22.0	36 6
Aggregate deposits ..	40,988	40,784	40,612	34,056	0 5	0.9	20.4	39.6
Foreign exchange reserves(a)	4,247	4,332	4,859	5,778	—2.0	—12.6	—26.5	—27.3

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	July 1981	151.7(a)	145.5 (a)	4.3	14 6
Exports	Rs. crores	May 1981	383	627	—38.2	—15 7
Imports	Rs crores	May 1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May 1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	August 1981	4,247	4,859	—12.6	—11.0
Wholesale price Index ..	1970-71=100	August 1981	287.4	283.7	1.3	13.0
Consumer price Index for Industrial workers ..	1960=100	July 1981	447.0	439.0	1.8	13.6
Unemployment(d)	Lakhs	Feb 1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110,9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2.6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148.1	112.6	4.2	4.6
Exports	Rs crores	6,675	6,459	2,523	3.3	14.9
Imports	Rs crores	12,210	8,908	2,955	37.1	22.5
Trade balance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6.8	31.9
Money supply (M3) (b)..*	Rs crores	55,221	46,800	17,571	18.0	17.8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.8	217.6	139.7	18.0	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	Lakhs	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(...) = Not available

Bombay spot exchange rates of leading currencies as on 14-9-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.40	9.60
Austria	A. Schilling	180	185
Belgium	B. Franc	423	432
Canada	C. $	12.85	13.30
Denmark	D. Kroner	81.00	82 20
France	Franc	61.90	63 00
Hong Kong	H.K. $	64 50	66.50
Italy	Lira	13 030	13,200
Japan	Yen	2470	2520
Malaysia	M. $	25 50	26 30
Netherlands	Guilder	28 50	29 00
Norway	N. Kroner	64 30	65.40
Singapore	S. $	23.20	24.00
Sweden	S. Kronor	55.70	56 70
Switzerland	S. Franc	22.00	22 50
UK	£	6.0690	6.1210
USA	$	10 78	10 98
West Germany	D.M.	25.70	26 20

CORPORATE SECTOR

In the market

Fibreglass Pilkington

Fibreglass Pilkington Ltd (Registered office: 9, Wallace Street, Bombay 400 001) is offering for public subscription at par 1,10,948 (13.5 per cent) secured convertible debentures of Rs 156 each totalling Rs 1.73 crores. Apart from this, 51,432 (13.5 per cent) secured convertible debentures of Rs 156 each at par totalling Rs 80.23 lakhs are being offered to resident Indian equity share-holders of the company and 6,000 (13.5 per cent) secured convertible debentures of Rs 156 each at par totalling Rs 9.36 lakhs have been reserved for allotment to resident Indian directors and/or employees of the company. The subscription list will open on September 21 and will close on October 1 or earlier but not before September 23.

The company was incorporated as a public limited company in 1962 for the manufacture of fibreglass at Thane, Maharashtra. The object of the present issue is to finance a part of the capital outlay required for the modernisation of the company's plant and machinery at Thane and to reduce its non-resident interest from 50.39 per cent to 40 per cent.

Indian Rayon

The Indian Rayon Corporation Ltd (Registered office: Junagadh-Veraval Road, Veraval-362 266 Gujarat) is offering for public subscription at par 5 lakh 13.5 per cent secured debentures of Rs 100 each totalling Rs 5 crores. The subscription list which opened on September 14 will close on September 24.

The company was incorporated in September 1956 for the manufacture of viscose filament rayon yarn at Veraval. It is setting up a plant at Halol, Panchmahal district in Gujarat for the manufacture of 6,000 tonnes per annum of high tension insulators and bushings and another plant at Malkhed, District Gulbarga in Karnataka for the manufacture of 5.4 lakh tonnes per annum of portland cement. The object of the present issue is to augment the company's resources.

Shree Bhawani Paper Mills

Shree Bhawani Paper Mills Limited (Registered Office: 33 Dayanand Marg, Allahabad 211 002) is entering the capital market with a public issue of 11,60,000 equity shares of Rs 10 each for cash at par totalling Rs 1.16 crores. The subscription list will open on September 28 and close on October 16 or earlier but not before September 30.

The capital issue will be used by the company to partly finance an integrated pulp and paper plant for the manufacture of a wide variety of writing and printing paper with an annual installed capacity of 8,250 tonnes. The project will be located at Rae Bareli (UP). The total cost of the project is estimated at Rs 6 crores and is being financed by equity capital of Rs 2 crores and term loans from IDBI, IFCI, ICICI and PICUP to the extent of Rs 4 crores. There will be a Central cash subsidy of Rs 15 lakhs because the project is located in a backward area. The entire plant and machinery will be procured indigenously. The pulp mill is scheduled for commissioning by April 1982 and the entire machinery by June 1982. Commercial production is expected to commence by July 1982.

Other developments

Mafatlal Fine Spg to expand

The Mafatlal Fine Spinning and Manufacturing Co Ltd has received permission to increase its capacity by 30,000 spindles, of which 14,000 will be in Navsari and the rest in Bombay. Disclosing this at the company's annual general meeting, chairman, Mr Arvind Mafatlal, said that the company's installed spinning capacity would thus go up from 150,000 spindles to 180,000 spindles.

He described the last year as a difficult period for the industry. Power and raw material costs had gone up by 50 per cent in the past 12 months, but the company was not able to pass on these costs to the consumer because of consumer resistance. There have been severe power restrictions in the past three months. Though the power situation has improved in Gujarat now, the situation has remained unchanged in Maharashtra, where there is a 35 per cent power cut.

In spite of these constraints, the turnover for the first five months from April to August this year was higher at Rs 37.40 crores—Rs 31.70 crores for textiles and Rs 5.71 crores for chemicals. The average rate of growth was 11.4 per cent over last year's figure of Rs 33 crores. Exports during the year have however, dropped.

He said that company's chemical plant was doing well even though there was a shortage of raw materials since there was a shortage of raw materials from Mettur Chemical.

Mr Mafatlal said that long term prospects for the industry were good though the short-term picture was grim. Credits were becoming more difficult and profits were under pressure. The company's first phase of modernisation was over and the second phase was under implementation. There would be an investment of Rs 20 crores in the second phase. Of this, the Industrial Development Bank of India had sanctioned Rs 6 crores. The remaining amount would be generated from internal resources.

Bajaj Auto pays 25 per cent

Sales and other income of Bajaj Auto Ltd for the year ended June 1981 increased to Rs 109.61 crores from Rs 53.37 crores in the previous year. The net profit, after providing Rs 6.36 crores (Rs 2.99 crores) for depreciation and Rs 7.25 crores (Rs 4.25 crores) for taxation, amounted to Rs 7.47 crores (Rs 4.89 crores). The equity dividend recommended for the year under review is 25 per cent (20 per cent). An amount of Rs 2.66 crores (Rs 1.13 crores) is transferred to investment allowance reserve and Rs 4.19 crores (Rs 2.66 crores) to general reserve. Production of two-wheelers during the year under review, was 150,480 numbers (88,651 numbers) and that of three-wheelers was 22,540 numbers (13,701 numbers). Exports during the year under review were Rs 13.32 crores (Rs 10.22 crores).

Chemplast: Sales rise

Chemicals and Plastics India Ltd, has reported higher sales for the year ended March 1981 at Rs 21.20 crores compared to Rs 14.76 crores in the previous year. The net profit, after providing Rs 83.76 lakhs (Rs 51.35 lakhs) for interest payments, Rs 67.50 lakhs (Rs 51.67 lakhs) for depreciation and Rs 34.50 lakhs (Rs 87 lakhs) for taxation, amounted to Rs 1.27 crores (Rs 98.94 lakhs). The equity dividend recommended for the year under review is 16 per cent. An amount of Rs 42 lakhs (Rs 21.60 lakhs) is transferred to investment allowance reserve and Rs 14.75 lakhs (Rs 48 lakhs) to general reserve. Production of

PVC resins during the year under review was 12,108 tonnes (10,872 tonnes) and that of PVC pipes and fittings 6,744 tonnes (4,874 tonnes).

ECC secures Iraqi contract

Engineering Construction Corporation Ltd (ECC), a subsidiary of Larsen & Toubro Ltd has been awarded a contract valued at Rs 40 crores for the construction of Police Headquarters Building in Baghdad by the State Organisation of Buildings, Ministry of Housing and Construction, Government of Iraq. The contract is on a turnkey basis covering, civil, electrical installation, airconditioning telephone, fire-detection, fire-fighting, sanitary and other special services. The building will have a facade of precast units. ECC has to complete this contract within 30 months beginning from August 8, 1981. ECC is also currently executing two other contracts in Iraq valued at Rs 26 crores.

Klayman Porcelains on stream

Klayman Porcelains Ltd, a joint venture of Andhra Pradesh Industrial Development Corporation Ltd, has gone into commercial production since June 24, 1981. The company's project set up at a total cost of Rs 1.57 crores, has an annual licensed capacity for manufacture of 1,320 tonnes of sophisticated range of ceramic tableware. The civil works of the company started in June 1979 and trial production commenced in March 1981, within the record period of less than two years. The company's plant has been set up with the most modern Japanese techniques and the latest German firing technology. Product sales started in April 1981 and presently the company's products are marketed in western and southern regions of the country. Its products have received encouraging response from the market.

Deccan Fibre Glass starts commercial production

Deccan Fibre Glass Ltd, which has its factory located at Village Timmapur, a notified backward area of Shadnagar Taluq, Mahaboobnagar district, Andhra Pradesh, on the Hyderabad-Bangalore highway has gone into commercial production. The company's unit, the only one of its kind in south India, involved a total project cost of Rs 11 crores. It is a joint sector venture of the Andhra Pradesh Industrial Development Corporation and Philips Carbon Black Ltd—a member of the Duncan group, who are the well-known leaders in carbon black technology in the country. Utilising the most modern technology, Deccan Fibres is now producing a wide range of products from yarn of various counts, rovings, woven rovings as well as chopped strands and chopped strand mats. It is using the trade name 'Decca Fibre' for its products. The products have a wide spectrum of use and have various applications like building, sanitaryware, sewerages, pipes for transportation of water etc. The company's plant has an annual production capacity of 2,000 tonnes of 'Decca-fibre' products.

Rajalakshmi Mills: Higher sales

The Rajalakshmi Mills Ltd has reported higher sales for the year ended March 1981 at Rs 9.98 crores compared to Rs 8.95 crores in the previous year. The net profit, after providing Rs. 16.93 lakhs (Rs 16.11 lakhs) for depreciation and Rs 49.50 lakhs (Rs 45.25 lakhs) for taxation, was Rs 48.21 lakhs (Rs 33.62 lakhs). The equity dividend recommended for the year under review is 16 per cent (15 per cent). An amount of Rs 3.35 lakhs (Rs 8.25 lakhs) is transfered to investment allowance reserve and Rs 36.25 lakh (Rs 15 lakhs) to general reserve.

Forthcoming company meetings

SEPTEMBER 19 TO SEPTEMBER 25

GWALIOR RAYON SILK MFG. (WVG) COMPANY LTD, Birlagram, Nagda (MP), (*September* 19, 4.15 *p.m.*)

INDIA STEAMSHIP COMPANY LTD, Grand Hotel, 15, Jawaharlal Nehru Road, Calcutta-700 013 (*September* 21, 3.30 *p.m.*)

BALMER LAWRIE & CO LTD, 21, Netaji Subhas Road, Calcutta, (*September* 21, 11.30 *a.m.*)

ORIENT PAPER & INDUSTRIES LTD, Brajrajnagar, Near Jharsuguda, District Sambalpur, Orissa, (*September* 22, 2.30 *p.m.*)

RATNAKAR SHIPPING COMPANY LTD, 9/1, R. N. Mukhejee Road, Calcutta-700 001. (*September* 22, 3 *p.m.*)

INDIAN ORGANIC CHEMICALS LTD, Jai Hind College Auditorium, A Road, Churchgate, Bombay-400 020. (*September* 23, 4.30 *p.m.*)

SRI RAMAKRISHNA STEEL INDUSTRIES LTD, Sri Ramakrishna Kalyana Mandapam Avarampalayam Road, Pappanaickenpalayam, Coimbatore-641 037, (*September* 23, 2.30 *p.m.*)

NILA PRODUCTS LTD, Indian Merchants Chamber Hall, 76, Veer Nariman Road, Churchgate, Bombay-400 020 (*September* 23, 11.30 *a.m.*)

GARWARE NYLONS LTD, Patkar Hall, SNDT University, Nathibai Thackersey Road, Bombay-400 020, (*September* 23, 3.30 *p.m.*)

CALCUTTA ELECTRIC SUPPLY CORPORATION (INDIA) LTD, Main Hall, Bengal Chamber of Commerce & Industry, Royal Exchange, 6, Netaji Subhas Road, Calcutta 700 001, (*September* 23, 11 *a.m.*)

A.C.C. VICKERS-BABCOCK LTD, Board Room, The Associated Cement Cos Ltd, 121, Maharshi Karve, Road, Bombay 400 020, (*September* 23, 3.30 *p.m.*)

RAJALAKSHMI MILLS LTD, Smt B. R. Ranganayaki Ammal Kalyana Mandapam, Dhanalakshmipuram Road, Near Central Studios, Trichy Road, Singanallur, Coimbatore 641 005. (*September* 23, 3 *p.m.*)

BORAX MORARJI LTD, Walchand Hirachand Hall, Indian Merchants Chamber Bldg, 76, Veer Nariman Road, Bombay 400 020. (*September* 23, 4 *p.m.*)

ENGLISH ELECTRIC COMPANY OF INDIA LTD, Main Hall, Bengal Chamber of Commerce & Industry, 6, Netaji Subhas Road, Calcutta 700 001 (*September* 24, 3 *p.m.*)

ANTIFRICTION BEARINGS LTD, Walchand Hirachand Hall, Indian Merchants Chamber Bldg, 76, Veer Nariman Road, Bombay 400 020, (*September* 24, 4 *p.m.*)

INDIA CEMENTS LTD, German Hall, 17, Prakasa (Mudaliar) Street, T. Nagar, Madras 600 017, (*September* 24, 10.30 *a.m.*)

FIBREGLASS PILKINGTON LTD, Kamalnayan Bajaj Hall, Bajaj Bhawan, 226, Nariman Point, Bombay 400 021, (*September* 24, 4 *p.m.*)

WIPRO PRODUCTS LTD, Preview Theatre, Blaze Minuet, Eucharistic Congress Building, 5, Convent Street, Bombay 400 039 (*September* 24, 4.30 *p.m.*)

RAYMOND WOOLLEN MILLS LTD, Walchand Hirachand Hall, Indian Merchants Chamber Bldg, 76, Veer Nariman Road, Bombay 400 020. (*September* 25, 3.30 *p.m.*)

REMINGTON RAND OF INDIA LTD, Saturday Club Ltd, 7, Wood Street, Calcutta 700 016. (*September* 25, 11.30 *p.m.*)

CITURGIA BIOCHEMICALS LTD, Patkar Hall, 1, Nathibai Thackersey Road, New Marine Lines, Bombay 400 020. (*September* 25, 3 *p.m.*)

PAPER MILL PLANT AND MACHINERY MANUFACTURERS LTD, M. C. Ghia Hall, Bhogilal Hargovindas Building, 18/20 K. Dubash Marg, Bombay 400 023. (*September* 25, 4 *p.m.*)

SANDUR MANGANESE & IRON ORES LTD, Lohadri Bhavan, Yeshwantnagar 583 124, via Sandur, Bellary District, (Karnataka). (*September* 25, 5 *p.m.*)

SESHASAYEE PAPER & BOARDS LTD, Pallipalayam, Cauvery, R.S.P.O., Salem District (Tamil Nadu). (*September* 25, 10 *a.m.*)

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Cable Corpn. of India		Graphite India		National Insulated Cable Co. of India		Union Carbide India		Universal Cables	
Industry Group	Electrical goods		Electrical goods		Electrical goods		Electrical goods		Electrical goods	
	Year ended December		Year ended December		Year ended April		Year ended December		Year ended March	
Item	1979	1980	1979	1980	1980	1981	1979	1980	1980	1981
Liabilities (at the end of the year)										
1. Net worth (i+ii) ..	636.1	805.1	1,070.6	1,251.4	436.7	462.8	4,460.5	4,815.3	785.0	1,047.9
(i) Paid-up capital (a+b)	340.0	340.0	330.5	445.8	202.5	202.5	2,172.2	3,258.3	260.3	260.3
(a) Equity	320.0	320.0	280.5	420.8	202.5	202.5	2,172.2	3,258.3	260.3	260.3
(b) Preference	20.0	20 0	50.0	25.0	—	—	—	—	—	—
(ii) Reserves	296.1	465.1	740.1	805.6	234.2	260.3	2,288.3	1,557.0	524.7	787.6
2. Borrowings (i+ii)	594.5	749.3	424.7	842.1	251.1	384.9	1,946.3	2,152.1	472.6	548.6
(i) Long-term	73.3	203.0	118.9	145.2	—	—	846.1	817.4	103.5	94.7
(ii) Short-term	521.2	546.3	305.8	696.9	251.1	384.9	1,100.2	1,334.7	369.1	453.9
3. Non-current liabilities and provisions	—	—	—	—	8.0	9.0	41.0	1.0	—	—
4. Current liabilities and provisions	292.0	1,112.1	592.7	873.1	189.5	336.2	2,393.2	2,681.8	738.5	873.6
Assets (at the end of the year)										
5. Gross fixed assets	920.3	1,179.5	1,674.6	2,036.1	342.1	391.4	7,924.3	8,309.0	1,008.9	1,214.3
6. Less depreciation	563.2	660.1	625.3	732.5	217.5	243.0	3,910.1	4,258.1	760.6	662.9
7. Net fixed assets (5—6)	357.1	519.4	1,049.3	1,303 6	124.6	148.4	4,014.2	4,050.9	448.3	551.4
8. Current assets (i+ii+iii)	1,165.5	2,147.1	1,038 7	1,663.0	754.4	1,030.0	4,796.8	5,569.3	1,527.9	1,898.8
(i) Inventories	566.1	1,142.1	731.2	1,247.2	345.4	396.3	2,928.4	3,116.1	890.0	1,117.4
(ii) Receivables and loans and advances	561.8	850.9	223.2	355.9	381.5	524.9	1,307.4	1,764.8	590.2	740.1
(iii) Others	37.6	154.1	84.3	59.9	27.5	108.8	561.0	688.4	47.7	41.3
9. Other assets	—	—	—	—	6.3	14.5	30.0	30.0	19.9	19.9
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**1,522.6**	**2,666.5**	**2,088.8**	**2,966.6**	**885.3**	**1,192.9**	**8,841.0**	**9,650.2**	**1,996.1**	**2,470.1**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	2,860.1	4,390.6	1,653.1	2,527.5	1,248.1	1,524.5	11,882.6	14,255.3	3,742.5	4,817.7
11. Increase in stock of finished goods and work in progress	—63.8	402.4	168.9	443.6	—54.8	70.8	49.2	83.2	68.4	191.2
12. Value of production (10+11)	2·796.3	4,793.0	1,822.0	2,971.1	1,193.3	1,595.3	11,931.8	14,338.5	3,810.9	5,008.9
13. Other income	30.3	30.5	20.0	23.6	10.8	16.8	150.7	236.8	8.4	9.2
Expenditure										
14. Materials, stores and other mfg. expenses	2,081.2	3,402.0	1,050.7	1,843.6	801.7	1,091.8	7,000.9	8,857.9	2,749.9	3,603.5
15. Current repairs	37.0	57.6	42.3	44.4	19.9	18.9	415.8	378.2	54.4	69.7
16. Salaries and wages	234.9	283.8	162.8	197.1	144.2	157.0	1,718.5	1,793.0	125.8	150.9
17. Welfare expenses	11.6	24.1	36.6	45.2	23.8	28.1	164.6	195.9	12.7	17.5
18. Managerial remuneration	0.1	0.1	—	—	0.7	0.7	—	0.4	—	—
19. Other expenses	77.5	187.6	107.5	158.1	78.8	138.4	886.6	1,059.0	175.8	203.7
20. Depreciation	51.7	98.1	90.5	107.6	21.7	25.4	320.2	365.2	84.7	103.3
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	332.6	770.2	351.6	598.7	113.3	151.8	1,575.9	1,925.7	616.0	869.5
23. Interest	103.9	118.6	55.2	121.5	41.1	56.8	198.7	314.7	63.3	83.5
24. Tax provision	102.5	430.0	153.0	218.0	—	44.5	730.0	800.0	325.0	480.0
25. Profit after tax (22—23—24)	126.2	221.6	143.4	259.2	72.2	50.5	647.2	811.0	227.7	306.0
Appropriations										
26. Dividends (i+ii)	20.8	52.8	47.3	69.7	20.3	24.3	347.5	456.1	45.5	52.1
(i) Equity	19.2	51.2	44.9	67.3	20.3	24.3	347.5	456.1	45.5	52.1
(ii) Preference	1.6	1.6	2.4	2.4	—	—	—	—	—	—
27. Profit retained (25—26)	105.4	168.8	96.1	189.5	51.9	26.2	299.7	354.9	182.2	253.9
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**2,826.6**	**4,823.5**	**1,842.0**	**2,994.7**	**1,204.1**	**1,612.1**	**12,082.5**	**14,575.3**	**3,819.3**	**5,018.1**
Operational indicators (per cent)										
(a) Net worth/total net assets	41.8	30.2	51.3	42.2	49.3	38.8	50.5	49.9	39.3	42.4
(b) Inventories/net sales	19.8	26.0	44.2	49.3	27.7	26.0	24.6	21.9	32.4	23.2
(c) Operating profit/net sales	11.6	17.5	21.3	23.7	9.1	10.0	13.3	13.5	16.5	18.0
(d) Operating profit/total net assets	21.8	28.9	16.8	20.2	12.8	12.7	17.8	20.0	30.9	35.2
(e) Profit after tax/net worth	19.8	27.5	13.4	20.7	16.5	10.9	14.5	16.8	29.0	29.2
(f) Equity earning/equity capital	38.9	68.8	50.3	61.0	35.7	24.9	29.8	24.9	87.5	117.6
(g) Equity dividend	6.0	16.0	16.0	16.0	10.0	12.0	16.0	14.0	17.5	20.0
(h) Equity dividend coverage. (No. of times)	6.5	4.3	3.1	3.8	3.6	2.1	1.9	1.8	5.0	5.9
(i) Paid-up value per equity share (Rs.)	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	N.Q.	N.Q.	43.50	33.75	15.75	13.37	24.70	24.70	51.00	51.00
(k) Gross yield	..	..	3.7	4.7	6.3	9.0	6.5	5.7	3.4	3.9
(l) Gross fixed assets formation	9.8	28.2	13.7	21.6	20.2	14.4	8.3	4.9	27.8	20.4
(m) Debt/equity	0.12:1	0.25:1	0.11:1	0.12:1	..	..	0.19:1	0.17:1	0.13:1	0.09:1

NOTES: ..Category not applicable ... Amount/Precentage is negligible —Amount is nil N.Q. Not quoted N.A. Not available

The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometimee made in the above data. Totals may not add up due to rounding off.

Company Meeting

THE TATA POWER COMPANY LIMITED

Chairman's Statement

THE following is the summary of the Statement of Mr. Naval H. Tata, Chairman of the Tata Power Company Limited for the year 1980-81. The Annual General Meeting will be held on Monday, the 21st September 1981 at 2.30 p.m. at the Bombay House Auditorium.

TO
THE MEMBERS

In reviewing the operations of the Company during the year, it is difficult to avoid reference to power shortages and our efforts to mitigate their impact on the productive capacity of our region.

Load Growth

In spite of the prevailing statutory restrictions on demand and energy, the Companies' sales showed a growth rate of 5 per cent over the previous year. This is an indicator of the growing basic and irreducible needs of this metropolis. Commendable efforts in power shortage management had to be made by all concerned and many consumers were permitted, to utilise surplus energy potential available during non-peak hours. In spite of these measures, the demand for electricity has continued to grow at a faster rate, outstripping the available generating capacity.

Equity Issue

The capital requirements of the pioneering 500 MW Project involved an equity issue aggregating Rs. 17.5 crores. It was gratifying to find that the issue was over-subscribed by almost four times indicating the confidence of the investors in your Company and their faith in the capability of the management in handling expansion projects of this magnitude.

Trombay 500 MW Unit 5

Erection work of the 500 MW Unit has proceeded as per plans, in spite of various constraints, viz. delayed supply and non-availability of materials like sand, steel and cement. These limiting factors were overcome by expediting critical activities on a crash basis. By adopting methods of mechanisation as far as possible, we were able to achieve accelerated construction activity which otherwise would not have been possible by conventional manual methods.

We have introduced all measures for quality control, including quality audit, in the assembly and installation work of the 500 MW Unit. Every effort is being made to ensure that the construction programme aims at the ideal of the "Zero Defect" target to attain what is known as "success at the first attempt", a technique which has been successfully applied to space programmes.

Barring any major obstacles in our path, we expect the unit to be commissioned in the financial year 1982-83. This unit will help, to some extent, in reducing the wide imbalance between demand and supply of energy. However, even after this unit is commissioned, I am afraid that power shortages will continue and the relief provided by this 500 MW unit may not be adequate enough.

500 MW Unit 6 A Necessity

It is in this context that the need for additional generating capacity becomes most urgent for replacement of ageing units by more modern, reliable and fuel-efficient ones. This has become much more relevant and techno-economically justified in view of the further steep increases in fuel prices and continued power shortages in the region. I am happy to report that our proposal to replace the three 60 MW units at Trombay by an additional 500 MW unit which, like the first 500 MW Unit will be more fuel efficient and more environmentally compatible than the ageing units 1, 2 and 3, is being seriously considered by the Maharashtra Government. I am very hopeful that the Government of Maharashtra and the Central Government will not delay their decision, since even the 150 MW unit 4 at Trombay is 16 years old and will normally be due for retirement in another 9/10 years.

The cost of the first 500 MW Project was estimated around Rs. 87 crores in 1969 when first proposed, but was reckoned at Rs. 180 crores after providing a cushion for price escalation and physical contingencies, when finally approved by the Government and the World Bank in late 1977. However, based on the actual orders placed, the final cost is likely to be higher. In the light of this experience, the need for early clearance of our second 500 MW Project at all levels, is of paramount importance. Cost increases arising out of delays in approval of power projects impose an additional strain in raising resources which are already scarce and costly. In other words, delays at any level in the clearanc of our proposed 500 MV Unit will only penalise ou consumers who are already over-burdened an adversely affected by th non-availability of powe apart from the curren high fuel costs. As in th case of our first 500 MV Project, the available infrastructure at the sit lends itself to the speedies execution of the capacit addition at the minimu cost.

Power Supply Tariffs

The subject of financia management and tariffs o electricity undertakings i India was studied in detail by the Rajadhyaksh Committee on power. Th final report of the Committee recommends tha the returns should be adequate to enable an undertaking to operate on soun commercial principles, a well as to provide returns to sustain growth withou excessive dependence o external finance. The present tariff structure unde the Electricity (Supply Act, 1948, does not provide for an element to generate finances for sustaining growth without depending on external finance. I hope that the recommendations of this Committee, which are in the overall interest of all the consumers, will be carefully considered and implemented even for private utilities.

Increasing Fuel Costs

Arising out of periodic oil price increase by the OPEC countries, the cost of fuel oil, which was originally around Rs. 189 per tonne in 1973, has presently mounted a little more than 13 times to Rs. 2,52 per tonne. The corresponding fuel oil cost per unit of thermal energy generated has risen from 5 paise to 66 paise. As a direct consequence of these increases, the fuel adjustment charges recovered from our consumers under our power supply tariffs had to increase from about 2.0 paise per unit to 20.5 paise, per unit. Thus the fuel adjustment charge has far exceeded the basic cost of electricity, which is in the neighbourhood of 15 to 16 paise per unit. We are conscious of the growing burden arising out of the impact of fuel costs on our consumers. On our part, we are sparing no efforts, with the assistance of the Government of Maharashtra, to obtain exemption from surcharges levied on residual fuel oil. These same surcharges, incidentally, are not applicable to fuel oil used in refineries and for captive generation of electricity for fertiliser plants. We are concerned that such a heavy burden on the industrial sector is sure to affect their operations appreciably. In an endeavour to reduce such high costs, we are actively pursuing the procurement of coal supplies which are comparatively more economical for our Trombay Thermal Station. The multi-fuel Trombay Thermal Station is dependent on fuels made available in the overall perspective and we have little control over the mix, the quantity and the cost of these fuels. Since the benefit from this station accrues to the State grid, it is worthwhile considering a proposal for sharing the total fuel costs by all consumers in the State uniformly, by averaging the cost. We have put forward this suggestion to the State Government and I do hope that it will not only receive the urgent attention of the Government but our consumers will also support our plea to the Government through their representative associations. I am grateful for the assurance of the support of the Millowners' Association in our efforts.

Consumers

I would like to take this opportunity to express my gratitude and appreciation to all our consumers for their whole-hearted response to our request for conservation and economy in power consumption, at a time when statutory restrictions on energy consumption and maximum demand continued. I look forward to their continued co-operation in this connection till the 500 MW Unit at Trombay goes into commercial operation, after which it is expected that the shortages and interruptions may be reduced to some extent.

Government and The State Electricity Board

Under the leadership of our Chief Minister, Shri A. R. Antulay, and the Honourable Minister for Energy, Shri Jayantrao Tilak, Maharashtra State is taking rapid strides towards self-sufficiency in power generation. We wish to assure the Chief Minister and all his cabinet colleagues that we will do everything to enhance the prestige and reputation of Maharashtra as a premier industrial State. We are grateful for the continued goodwill of the State Government in meeting the power/energy demands of the State in the most optimal manner. This goodwill will be further enhanced and cemented, now that we have Shri M. R. Natarajan and Shri J. Innocent, as the two representatives of the State Government on our Board. We extend to them a hearty welcome. Our relationship with the State Electricity Board continues to remain cordial and we are grateful to its Chairman, Shri S. N. Misra, for his understanding and co-operation in dealing with the difficult task of meeting energy/capacity shortages which have arisen from time to time. These have been tackled very effectively with minimum inconvenience to all categories of consumers.

The harmonious relationship between staff and management continued. Members will certainly join me in expressing our appreciation of the sustained admirable performance of the Companies' officers and staff at all levels. We can take legitimate pride in claiming that our Companies have an efficient team of management, engineers, technicians and skilled workmen and we are happy that our capabilities are recognised both at home and abroad.

10th August, 1981.

(NAVAL H. TATA)
Chairman

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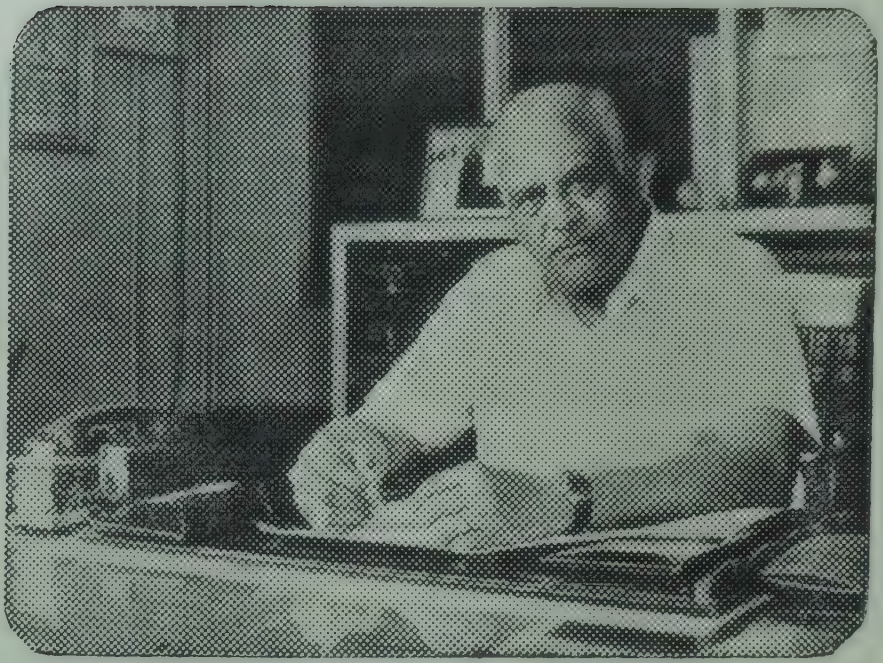

Chairman's Speech

SPEECH delivered by Cavaliere G. K. Devarajulu, Chairman, at the 71st Annual General Meeting of the Company on 10th September, 1981.

Ladies and Gentlemen,

I have great pleasure in welcoming you all to the 71st Annual General Body Meeting of your Company, in this new Building, which will not only house the office of your company but also of associate companies.

The notice calling for the meeting, the Annual Accounts and the Directors' Report for the year ended 31st March, 1981 have been in your hands for some time and with your permission, I shall take them as read:

I am particularly happy to observe that the performance of the Textile Industry has been good for the second year in succession, at a time when the general industrial production has been showing a negative growth. In spite of crippling power cuts and several other infrastructural constraints like shortages of cotton, coal, oil, etc., the Textile Industry has performed extremely well.

Indian Economic Scene:

High inflation fueled by the supply of unaccounted money has been the bane of the Indian Economy. The inflation is raging at 14.8 per cent unabated. The Government in its bid to contain this inflation has announced a package of monetary and fiscal measures, which include a hike in bank rate from 9 per cent to 10 per cent, revision in deposit ratio, restriction on lendings, adjustments in margin etc. These measures would adversely affect the growth, since money would be scarce and costlier for productive purposes. The new policy of "Dear money" will create more unaccounted money which will be cheaper.

The sixth plan has been drawn up with an investment of Rs. 1,72,210 crores of which the private sector's share is Rs. 74,710 crores. The Finance Minister and the IDBI Chief have advised the large houses in particular and Corporate sector in general not to rely on institutional finance for the Capital requirements and to tap the Investment market instead. I doubt the possibility of mobilising such a huge capital in the not so responsive investment market because there are no savings left with the Public.

The Industrial sector has registered a growth rate of 3.6 per cent in 1980-81 which is far below the target figure of 8.5 per cent. The Industry Ministry has fixed a target of 12 per cent for the year 1981-82, which is again too much to accomplish. The remedies to accelerate growth, are to be found by change of policies to improve the viability and increased production to yield better returns.

Cost Escalation:

The Cotton Textile Industry has been caught in a cost-push-vortex. The cumulative impact of the increase in the cost of cotton, power, and wages has made many a mill non-viable. During the past ten months alone the cost of production has increased by 32 per cent. While on the other hand the price of yarn has moved up only by 5 per cent and that of the mill made cloth by 15 per cent. At the sametime, the finished goods are accumulating in the godowns.

In fact, the financial working of a majority of the units is in the red for the past few months. If the situation does not improve, a number of units will be sick again.

Wages and Dearness Allowance:

Tamil Nadu is paying the highest wage for Textile labour in the country today. Our D.A. is also very high at Rs. 567 for August '81. This higher wages does not contribute to productivity or profitability and the mill whether viable or not has no option but to bear the burden passively. Thus the social cost is so high and so rigid that the industry needs a high profit to survive. When it makes large profits, as in the last two years, it pays heavy taxes at 65 per cent and retains hardly 10 per cent of the profit earned. Taxes are the main drain on the liquid resources. When there is a loss, the tax already paid is neither refunded nor adjusted but the loss wipes out the relatively small Capital and reserves and before one realises this danger, bankruptcy becomes imminent. It is high time that the Government considers a three year assessment instead of every year, at least for Textile Industry.

Raw material :

The cotton crop has again failed. It was estimated at 81.50 lakh bales and was revised to 78.50 lakh bales but the actual production is only 75.50 lakh bales. The maximum shortage is in the short staple varieties. The prices are ruling high from the beginning of the season. Prices of short staple varieties increased by 50 per cent while the others increased by 15 per cent only. Despite the high cost of the cotton, consumption touched a new mark of 77.04 lakh bales last year.

The multifibre approach has helped to reduce the pressure on cotton to a certain extent. But the high cost of the staple fibre, both indigenous and imported, has had a dampening effect on the use of man-made fibre.

Monopoly procurement of cotton :

There is an unfortunate move to introduce monopoly procurement of cotton in Gujarat, Tamil Nadu, Punjab etc. This scheme as implemented in Maharashtra by the Maharashtra State Co-operative Marketing Federation is far from being satisfactory. The pricing policy by this agency has affected the Industry adversely.

Production :

Despite constraints the Industry has performed well. The Cotton cloth and cotton yarn production have increased by 8.42 per cent and 11.13 per cent respectively over the previous year.

The Textile Industry has performed creditably on the export front against heavy odds. Export of mill made and powerloom cloth has recorded an increase of 13.5 per cent over the previous year's figure. Statistics show that Textiles is the largest single foreign exchange earner. An ambitious target of Rs. 900 crores has been fixed for the current year, which is hard to achieve in the face of stiff global competition in an unresponsive market, under the present unremunerative rates.

The increase in production is not commensurate either with the plan or the growth of population. The responsibility of clothing the population is on both organised and decentralised sectors equally. The decentralised sector is pampered and very liberally subsidised while the organised sector is being crippled.

Precarious power position :

The power situation is precarious in most states. Despite comfortable hydel prospects, the outlook is bleak and causes serious concern. In Tamil Nadu, according to the Minister for Electricity, the present grid demand is 6 per cent more than the total supply. Urgent and immediate measures to introduce better project management techniques at the Electricity Boards, correction of the technical deficiencies and improved maintenance may help, and that too, in the long run only.

Modernisation—the Key to progress :

The draft Five Year Plan 1978-83 referred to the situation faced by the Textile Industry as steadily falling in productivity on account of lack of modernisation and generally increasing costs. It also mentioned a few contributory factors to the prevalent sickness of this organised sector. Modernisation is the key to efficient and economic working of this industry and ICMF, realising its importance, has pleaded for the continuance of the 'Soft Loan' scheme of the IDBI on a permanent basis. Besides this, it has also advocated the creation of a 'Modernisation Reserve', out of tax payments, in the accounts of the Companies, so that a fair portion of their earnings are available to the industry for this vital purpose.

The need for removing and preventing the recurrence of sickness in the Textile Industry, which plays a vital role in national economy, employing directly a labour force of 11.3 lakh and involved in the production of a basic necessity to the population, hardly requires to be stressed.

Employee-Employer relationship :

Deteriorating standards of public morality, fall in ethical values and discipline, rampant corruption are the order of the day. These, together with the militant trade union activities and rivalry, have shattered good relationships and threaten the very existence of the Industrial activities.

Fortunately in the Textile Industry, the number of strikes and lock outs this year was smaller as compared to last year and our mills in particular enjoyed smooth working throughout.

Company's performance :

The performance of your Company has been gratifying with an increase of 23.5 per cent in turnover compared to last year's working which was only 10 months, due to the state-wide strike in the industry. This year's profit includes the profit of Rs. 58.86 lakhs received on sale of shares. The depreciation is higher at Rs. 174.33 lakhs as against Rs. 114.95 lakhs last year. Similarly, the investment allowance has gone up from Rs. 39.26 lakhs in 1980 to Rs. 57.18 lakhs in 1981. After providing for all, including Rs. 135 lakhs for taxes, we have been able to transfer a sum of Rs. 127 lakhs to General Reserve as against Rs. 102 lakhs last year. A dividend of 16 per cent on the enhanced share capital of Rs. 3,73,50,000 has been recommended after the Bonus issue at the ratio of 1 : 1.

Programmes for the future :

The Company has a few programmes on hand and on the anvil. The expansion at the Palladam Mills is progressing. The old looms at the Coimbatore Mills are being replaced with modern high speed Lakshmi-Ruti 'C' type weaving machines. We have also imported 4 new Ruti-Rapier weaving machines which will be installed shortly at our Coimbatore Mills. The existing processing facilities are being improved and expanded with the addition of new machinery. A new showroom at Pondicherry will be added to our sales outlets this year.

Acknowledgement :

I shall avail this opportunity, before concluding, to wish well all our valued customers, dealers and suppliers and to record our appreciation of the devoted and sincere work put in by our employees, staff and officers at all levels. I also thank my colleagues on the Board for their wise counsel and co-operation in guiding the conduct of the affairs of the company.

I pray Goddess Lakshmi to shower her choicest blessings for the continued prosperity of all of us.

Thank you all.

NOTE : This does not purport to be a record of the proceedings of the Annual General Body Meeting.

EQUITIES

Drift persists

Bombay, September 14

With the emergence of renewed short-selling and bull offerings, equities yielded further ground during the past week. The smart recovery after the mid-week, however, lifted equity prices. As a result on balance losses were only small-to-modest in most cases. However, activity continued to be restricted and the undertone at the close of the week was steady.

At the outset of business, equity sentiment was badly hit by rumours that the Shipping Development Fund Committee would not allow any shipping company to pay more than 10 per cent dividend. The subsequent interpretation was that the shipping companies could pay 10 per cent dividend but they are required to get the consent of SDFC if the dividend is in excess of 10 per cent.

Sentiment was also aided later by the reports that the International Monetary Fund (IMF) had tentatively approved the 5.68 billion dollar loan to India, the largest in IMF's history. The normal badla charges also helped pivotals. Besides, BSE imposed special margins on more bears to arrest selling.

Century, which dropped from Rs 808 to Rs 787, staged a smart rally to reach the level of Rs 813.50. The scrip, however, again came in for small offerings and the price was finally placed at Rs 806, with a net nominal loss of two points. Standard, however, suffered a severe setback and the price plummeted from Rs 515 to Rs 490. With the lower level inviting short-covering and replacement support, the scrip closed at Rs 496, yet it lost as much as 19 points from the previous rates.

Shipping shares were the worst affected by heavy offerings. G.E. Shipping declined steeply from Rs 49.75 to Rs 38.50 before closing finally at Rs 42.50. The net loss was Rs 7.25. Scindia lost Rs 2.25 at Rs 22.50. TELCO came in for renewed offerings and yielded further 17 points. ACC, Tata Steel, Bombay Dyeing, IDI, Tata Chemicals, Tata Oil, Gwalior Rayon, PAL and NRC were also caught in the selling wave. Voltas, however, was in the limelight on informed support and the scrip recorded a significant gain of Rs 26 at Rs 235. Amar Dye-Chem recovered by Rs 6.50 to Rs 150. L & T and Tata Mills were steady.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 5-9-81	High	Low	Closing quotations 12-9-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	215.00	208.75	205.00	206 25
Bombay Dyeing (25)	80 50	83 00	77 50	79.00
Central India (50)	58 00	58 00	55 00	55 00
Century (100)	808 00	813 50	787 0	806 00
Dawn (50)	74 00	72 00	70 00	71.00
Elphinston (50)	50.00*	—	—	50 00*
Finlay (100)	105.00	105 00	101.00	105 00
Gokak (100)	204 00	205.00	203 00	205 00
Gwalior Rayon (10)	55 50	56 35	52 75	54.50
Khatau (100)	255 00	265 00	255 00	255 00
Kohinoor (100)	55 00	56 00	55.00	56 00
Morarjee (100)	245 0	250 00	237 50	237 50
National Rayon (100)	355.00	360 00	345 00	350 00
New Great Eastern (100)	93 50	—	—	96 50 *
Phoenix (100)	47.00*	47.00	43.00	46 00
Podar (10)	7 50	7.50	7.00	7 00
Shreeniwas (100)	85 00*	—	—	85.00*
Simplex (50)	72 50	73 00	72.00	72 50
Standard (100)	515 00	5 6 00	490 00	496 00
Svadeshi (100)	168 00	170 00	165 00	168 00
Swan (100)	220 0	220.00	210.00	215 00
Tata Mills (25)	27.00	29.50	26.00	27.00
Electric				
Ahmedabad (100)	93 00	94.00	92.00	92 00
Andhra Valley (100)	117 00	116.00	111.00	114 00
B.Subarban(100)	118 00	120 00	117 50	120 00
Tata Hydro (100)	116 50	116 00	116 0	116 00
Tata Power (100)	115.00	116.00	114.00	116.00
Steel				
Mukand (10)	27 75cd	28 00cd	24 75xd	25 25xd
Tata Steel (100)	345.00	347.00	330.00	341.00
Engineering				
Larsen & Toubro (10)	63 50	65 00	62.00	64 00
Tata Eng. & Loco (100	596.00	6 1 00	571 00	579 00
S.L.M. Maneklal (100)	157 50	17 00	155.00	170 00
Voltas (100)	209 00	235 00	204 00	235 00
Walchandnagar (100)	200.00	200.00	190.00	192.50
Dyes & Chem				
Amar Dye-Chem (100)	147.50	150 00	143 75	150 00
Indian Dyestuff (100)	219 00	223 00	215.00	218 00
Polychem (50)	72 00	71 00	68 00	69 00
Tata Chemical (10)	59.00	59 75	54.00	55.00
Shipping				
Great Eastern (10)	49 75	50 50	38 50	42 50
Scindia (20)	24 75	24.75	20.50	22 50
Cement				
A.C.C. (100)	140 50	146 00	136.00	139.00
Shree Digvijay (100)	150.00	152.50	145.00	145.00
Sugar				
Maharashtra (50)	49 00	49 00	48.00	49 00
Phaltan (50)	39.00	39.00	10 00	39.00
Miscellaneous				
Bombay Burmah (25)	43 75	44 25	43 50	44.25
Hindustan Motors (10)	24 50	25 25	22 0	22 50
Premier Automobiles (100)	244 50	252 50	235 00	239 00
Pre. Construction (50)	77 00	79 00	77 00	77 00
Sirpur Paper (10)	28 75	29 50	26 00	27 00
Tata Oil (25)	65 00	66 00	60 00	63 00
W. Coast Paper (100)	102 50	101 25	90 00	90 00
Wimco (10)	14.25	14.25	12.50	14.00
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	321 00	347 00	319 00	346 00
Century Enka (100)	660 00	655 00	637 50	637 50
Garware Nylons (10)	34 50cd	35 00cd	32 50xd	33 50xd
Gold Mohur (100)	92 00*	—	—	92 00*
Indian Rayon (10)	87 50	88 00	79.50	83 00
J. K. Cotton (10)	18 00	18 00	16 50	16 75
J. K. Synthetics (10)	50 50	50 50	48 50	49 00
Lakshmi Vishnu (100)	58 00	58 00	56 50	58 00
Mafatlal Fine (100)	230 00	232 5	227 50	230 0
Mafatlal Industries (125)	377 50	377 50	373 75	377 50
Modella Woollen (10)	10 0	—	—	10 00*
Modipon (10)	67 00*	—	—	67 00*
Nirlon (10)	57 25	58.50	56.00	58 00

	Closing quotations 5-9-81	High	Low	Clos quota tion 12 9-
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.
Raymond Woollen (10)	65.00	55.00	53.00	54
Reliance Textile (10)	97.25	101 00	96 25	99
S. I. Viscose (100)	242 50	242 50	232 50	240
Stretch Fibres (10)	8 50	9 00	8 00	8
Swadeshi Polytex (10)	15.00	15.00	14 50	14
Electric				
Amalgamated (10)	7.00*cd	9.00cd	6.50xd	6.5
Surat (100) ...	94.00	94.00	93.00	93.0
Cement				
Mysore Cement (10)	30.00	30.50	29 00	29 5
Saurashtra Cement (100)	110.00*	—	—	110.0
Paper				
Andhra Paper (100)	220.00	—	—	220.0
Bhadrachalam (10)	17.50*	—	—	17.5
Jayant Paper (100)	160.00	160.00	150.00	155.0
Rohit (100)	215.00*	—	—	215.0
Steel, metals, alloys				
Ennore Foundries (10)	34.50	38.00	34.00	35 5
Ferro Alloys (100)	260 00	262 50	24 00	2.0 0
Hind Aluminium (10)	47 50	48 00	44 50	45 0
Khandelwal Ferro (100)	127 00	130 00	125.00	130 0
Mahindra Ugine (10)	54 00	55.00	51.00	53 5
Tata Yodogawa (100)	125.00	—	—	125.0
Engineering				
Associated Bearings (100)	375.00	375 00	375.00	375.0
Bimetal Bearings (10) ...	40.00	40.00	39 00	40 0
Blue Star (10)	32.50	32.75	32 50	32 5
Elecon Engineering (100)	435 00	435 00	420 00	420 0
Gujarat Steel Tube (100)	62 .00	640 00	6 5 00	640 0
Hindustan Brown (100)	306 25*	31 00	310.00	310 0
Ingersoll-Rand (10) ...	103 00	106 00	100 00	10 0
Jyoti (100)	245 00	240 00	222 50	225 0
Kamani Eng. (10)	70.00	71.50	66.00	68.0
Kirloskar Cummins (100)	521.00	525 00	517 50	525 0
Kirloskar Oils (10) ...	28 09	28.00	27 00	27 5
Kirloskar Pneumatic (10)	49 50	5 .00	45.00	47 0
Mahindra (10)	48 00	49 50	48 00	49 0
New Standard (100) ...	122 50	122 50	117 00	122 5
Sandvik Asia (100) ...	327 50	325 00	312.50	315 0
Vulcan-Laval (10) ...	32 75	33 00	32 50	33 0
Zenith Steel (10) ...	45.00cd	46.00cd	44.50cd	45.0
Cables & Elec.				
Asian Cables (100) ...	215.00	217.50	210.00	213 75
Bajaj Electricals (100) ...	1 5 00	—	—	85 00
Crompton Greaves (100)	355 00*	355 00	348 75	351 25
Otis Elevator (10) ...	54 50*	—	—	54 00
Siemens India (10) ...	51.00	51.50	50.50	51.00
Chemicals				
BASF (10)	56 00	55.00	55 00	55.00
Bayer (India) (100) ...	230 00	237 50	228 75	230 00
Chem & Fibres (10) ...	21 00	21 00	20 00	2 00
Colour-Chem (100) ...	195 00	197 50	190 00	197.50
German Remedies (10)	25 75*	—	—	25 75
Gujarat State Fert. (100)	425 00	428 00	405 00	414 00
Hindustan Lever (10) ...	42 75	42 75	41 75	42 75
Indian Organic (100) ...	300 00	307.50	300.00	305.00
National Organic (100)	206 00	215.00	203 00	204 00
Pfizer (10	24 50	24 75	24 00	24 50
Polyolefins Ind. (100) ...	290 00	295 00	286 25	287 50
Sandoz (10)	25 75	25.00	23.00	24 00
Synthetics (100) ...	101 00	102 00	96 00	99 00
Warner-Hindustan (10)	23 50*	—	—	23.50
Zuari Agro (10)... ...	26.00	26.00	24.00	25.00
Miscellaneous				
Bajaj Auto (100)	1,370.00	1,375.00	1,250.00	1,262.50
Bombay Oxygen (100)	115 00	115 00	112 00	112 00
Cadbury (10)	21 0	20 50	2 00	20.50
Camphor & Allied (100)	227 50*	22 00	2 0 00	22 00
Ceat Tyres (100) ...	197 50	197 0	190 0	190 00
Colgate-Palmolive (10)	137 00	138 00	134.00	138 00
Empire Industries (15)	26 00	25 50	25 00	25 50
Fibre glass (10) ...	22 25cd	24 00cd	19.75xd	22 00
Gammon India (10) ...	21 0	21 00	19 7	20.25
Hindustan Ferodo (10)	38 00	39 50	39.00	39 50
Hoechst Dyes (10) ...	25 75	25 50	25.00	25 00
Indian Hotels (10) ...	77 00	82 00	76 00	80 00
Motor Industries (100)	447 50	465 00	445 00	460 50
Tata-Finlay (10) ...	12 50	12 50	12 00	12 50

Notes : Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum—right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the column

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report

Market Gossip

Black money bonds in black

THE verdict of the Supreme Court in favour of the Government's special bearer bonds scheme has set at rest the uncertainties about its future. Following the judgment bearer bonds reportedly started fetching higher premiums. In Bombay bonds were reported to be attracting a premium of Rs 2,500 and selling at Rs 12,500. In Delhi a few bonds were reported to have been transacted at a premium of Rs 2,000. The Union Finance Minister, Mr R. Venkataraman, has categorically stated that the Government would not reissue bearer bonds. Since the black money generation continues with full vigour, the attractiveness of the bearer bonds remains and the stoppage of their supplies logically makes them saleable at a premium.

Another reason for this premium to go up is the continued raids by the Income-tax Department on various traders and professionals. This would generate further demand for these bonds which would make them dearer. If one is caught with a large amount of currency notes, one is liable to explain the possession to the satisfaction of the income-tax authority. But if one possesses bearer bonds in any quantity it is legal and safe. Not a single question will be asked.

Reports have it that it is because of this safety that quite a few black money transactions, including those relating to land and flats take place with the exchange of bonds. Some people have also entered into forward trading in the bonds. The Bombay Stock Exchange has also listed bearer bonds for trading. The Government's decision that the repayment of the special bearer bonds would be made by 'account payee cheque or draft' does not diminish their attractiveness, rather enhances it. It is believed in market circles that in about two months' time premium on bonds would go up to as high as Rs 5,000. It is the irony that bonds issued to mop up black money themselves are being traded in black and are in the process of generating further black money.

Uptrend in silver

THE silver markets are once again in the limelight. Prices have shot up in both the domestic and overseas markets. In Bombay last month silver was quoted at around Rs 2.650 and now commands around Rs 2.800 per kg. In overseas markets, the price has moved up from $8.50 to $11 per ounce. Markets abroad have strengthened partly because of speculation and partly because of political tensions in Poland, South Africa and Libya. Marketmen are disturbed by the invasion of Angola by South Africa and the speculation is that gold from South Africa may not be available if the fight is a prolonged one and black labour in mines downs its tools. This was the immediate reason for the gold price to advance from $425 to $446 and it has found a sympathetic rise in silver. Unsettled conditions in Poland are said to be responsible for a drop in silver production and year's output is expected to be down to 11.4 million ounces from 23.1 million ounces last year.

Japan has reportedly changed its mind and decided to postpone the release of 11.57 million ounces of silver to domestic consumers through four public auctions. The reason given is that it was feared that disposal of official stocks of silver will depress silver prices. In 1980 Japan has sold one lakh ounces of silver to consumers. In the neighbouring country of China from where reports of lot of smuggling of silver to Hongkong had appeared the authorities are said to have come down heavily on smugglers. This has reduced the inflow of Chinese coins and silver to Hongkong and western markets. This is another factor which has influenced the world silver market.

Within the country however, silver prices have improved on demand from smugglers who are believed to have lifted 25 to 30 tonnes in August and about 10 tonnes so far during this month. At one time world prices of silver were lower than in India but these have now risen to leave a sufficient margin for smugglers to be active (mainly in Gujarat and Punjab areas). Internal demand is also likely to revive by the month-end when the Diwali season starts.

Worries for pepper exporters

THE trade in black pepper is unhappy that exports may not show a sign of revival in prices in the immediate future. World prices have been showing a downward trend for eighteen months and this has resulted in much lower earnings for exporters. The UK, West Germany and the Netherlands have cut their import requirements though the American demand has shown some growth. Brazil has been resorting to aggressive selling at lower and lower prices and the expectations are that its exports will reach an all-time peak of 32,000 tonnes in the 1981-82 season. The 1981-82 Indian season is only about six weeks away. The Brazilian offensive has forced India to withdraw so to say from the US and West European markets and increase its reliance on communist buyers. As many as 14,500 tonnes of black pepper out of the 16.790 tonnes shipped between November 1980 and May 1981 went to communist countries, the Soviet Union alone accounting for 12,647 tonnes. But exporters are concerned at the diversion on such a scale of this trade and would be happy to regain the western markets and not rely solely on the communist ones.

National policy for alcohol?

ALCOHOL-BASED industries in West Bengal hope that the Government of India has now fully recognised the need for a rational policy on alcohol. It is being pointed out that in the absence of such a policy while surplus states continue to hold stocks of alcohol industrial users, mostly in the deficit states, faced shut down and lay-offs. West Bengal industries have been gratified at the Centre's response to the representations made about shortage of alcohol and the Centre's subsequent action to issue import licences for a total of four million litres. The Alkali and Chemical Corporation of India's share of 3.2 million litres will enable the polythelene plant to operate for a month. It is in the context of this situation that the industries in West Bengal are demanding a fair and equitable distribution of the alcohol produced in the country. Diversion for potable uses it is suggested should not be at the cost of alcohol-based industries.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity	*Market*	*September 12, 1981*	*A week ago*
Groundnut	(*Rajkot*)	550	550
Rapeseed	(*Kanpur*)	515	508
Sesamum	(*Delhi*)	605	600
Castorseed	(*Kanpur*)	283	283
Linseed	(*Kanpur*)	553	523
Sugar	(*Bombay*) (*a*)	554	528
Cotton	(*Bombay*) (*b*)	4,913	4,400
Jute	(*Calcutta*) (*c*)	240	240
Aluminium	(*Bombay*) (*d*)	1,480	1,480
Copper	(*Bombay*) (*e*)	3,580	3,580
Lead	(*Calcutta*) (*f*)	1,240	1,250
Zinc	(*Calcutta*) (*g*)	1,700	1,710
Gold	(*Bombay*) (*h*)	1,755	1,752
Silver	(*Bombay*) (*i*)	2,770	2,730
Caustic soda	(*Bombay*) (*j*)	610	635
Soda ash	(*Bombay*) (*k*)	233	238

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) Assam Bottoms, (d) Scrap. (e) Wire coil, (f) Scrap. (g) Hard spelter, (h) Standard. (i) .996. (j) Flakes and (k) Tata

DHRANGADHRA CHEMICAL WORKS LIMITED

NOTICE

IT IS HEREBY NOTIFIED FOR THE INFORMATION OF THE PUBLIC THAT DHRANGADHRA CHEMICAL WORKS LIMITED PROPOSES TO MAKE AN APPLICATION TO THE CENTRAL GOVERNMENT IN THE DEPARTMENT OF COMPANY AFFAIRS, NEW DELHI, UNDER SUB-SECTION (2) OF SECTION 22 OF THE MONOPOLIES AND RESTRICTIVE TRADE PRACTICES ACT, 1969, FOR APPROVAL FOR THE ESTABLISHMENT OF A NEW UNDERTAKING FOR THE PRODUCTION, SUPPLY, DISTRIBUTION OR CONTROL OF 30,000 MT PER ANNUM OF WHITE CEMENT. OTHER PARTICULARS OF THE PROPOSED UNDERTAKING ARE AS UNDER:

(1) Name of the proposed undertaking : **DHRANGADHRA CHEMICAL WORKS LIMITED**

(2) Name(s) of person(s) or authority/authorities proposing to establish the new undertaking. Where it is a body corporate furnish details of its management structure together with those of the proposed undertaking : Dhrangadhra Chemical Works Limited which is managed by Managing Director under the supervision and control of the Board of Directors, namely:

Shri Sahu Shriyans Prasad Jain (Chairman)
Shri H. H. M. Sriraj Dhrangadhra
Shri A. K. Roy
Shri Gopaldas P. Parikh
Shri Dharma Vira
Shri Radhakrishna R. Ruia
Shri F. H. Tapia
Shri K. M. Philip
Shri Prem Chand Jain
Shri D. G. Ramaiah
Dr. G. P. Kane
Shri Gian Chand Jain (Managing Director)
Shri Shashi Chand Jain (Managing Director)

The new undertaking will be managed by the Managing Directors under the supervision and control of the Board of Directors. If necessary, a new Managing Director may be appointed to look after the new undertaking subject to the approval of the Government of India.

(3) Capital structure of the applicant person or authority and of the proposed undertaking :

SHARE CAPITAL:

Authorised Capital:		
1,00,000 Preference Shares of Rs. 100/- each	1,00,00,000	
2,50,000 Equity Shares of Rs. 100/- each	2,50,00,000	3,50,00,000
Issued, Subscribed and Paid up Capital:		
2,591—11% (subject to tax at source) Cumulative Redeemable Preference shares of Rs. 100/- each fully paid up	2,59,100	
25,000—9.5% (subject to tax at source) Cumulative Redeemable Second Preference shares of Rs. 100/- each fully paid up	25,00,000	
35,000—9.5% (subject to tax at source) Cumulative Redeemable Third Preference shares of Rs. 100/- each fully paid up	35,00,000	62,59,100
2,34,774 Equity Shares of Rs. 100/- each fully paid up	2,34,77,400	
Add: Forfeited Shares	200	2,34,77,600
		2,97,36,700
140—7.8% Cumulative Redeemable Preference shares of Rs. 100/- each not surrendered by shareholders for redemption		14,000
		2,97,50,700

(4) Proposed location of the new undertaking : Tehsil-Dhrangadhra, Dist-Surendranagar, State-Gujarat.

(5) Brief outline of the cost of project, the scheme and source of finance : Estimated cost of the project Rs. 450 lakhs. The project is to be financed partly from our own resources and partly from borrowings and deferred payments.

Any person insterested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this notice, intimating his view on the proposal and indicating the nature of his interest therein.

Dated: 31st August, 1981.

Registered Office:

Dhrangadhra-363 315
Gujarat State

For DHRANGADHRA CHEMICAL WORKS LIMITED,

SHASHI CHAND JAIN
Managing Director

COMMODITIES

Cotton steady

Bombay, September 14

Quietly steady conditions prevailed in the spot cotton market during the past week with limited business passing. While there is expectation of cotton from Karachi reaching Indian ports in the next few days, there is as yet no clarification about the waiver of the import duty. The issue has been raised with New Delhi by those who have already booked some quantities. The efforts of the Indian Cotton Mills' Federation to win friends for Pakistan cotton have apparently been in vain as there has been no improvement in bookings.

The delegation that returned recently from Pakistan was back with the impression that Pakistan could, in fact, be tapped for more cotton if there is encouraging response from the Indian mills for the import of one lakh bales already agreed upon. The quality of cotton is said to be generally quite good and price attractive.

The Cotton Corporation of India, which has been assigned a significant role in cotton marketing under the integrated textile policy, has had a bad year. According to the latest report of its working for the year ending August 1980. it has suffered a record loss of Rs 13.65 crores. The CCI has conveniently attributed this loss to its fulfilling its social obligations.

Meanwhile, reports from Coimbatore say that there has been an improvement of nearly four per cent in the total production of all yarn at 1.59 lakh bales of 180 kg during July as compared to the normal monthly production. In relation to June, however, the increase is to the extent of 9.8 per cent. The estimated quantity of yarn available for the decentralised sector from the July production is placed at 1.04 lakh bales of cotton yarn 19,175 bales of viscose staple fibre yarn and 4,129 bales of blended.

Discussions on MFA negotiations are to be resumed in Geneva in the course of the next few days. Reports from Brussels indicate that the industrialised countries would refuse to negotiate on the basis of the proposals already submitted by the developing countries in July. Indications are that the protectionist postures adopted by the north will become more rigid, if anything, at the cost of the south.

The following is the trend of prices of some of the leading varieties :

(Rs. per candy)

	Septembet 4	August 28
Digvijay	...	...
Kalyan	4,650-4,800	4,650-4,800
Saurashtra CO2	4,800-5,050	4,800-5,000
Shankar 4	5,750-6,100	5,700-6,100
Maharashtra H 4	5,450-5,600	5,450-5,600
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,450	5,300-5,450
MP Y1	5,000-5,050	4,900-5,050
MP 1007	5,150-5,250	5,150-5,250
MCU 5 Guntur	5,900-6,100	5,900-6,100

Downward trend in yarn

Bombay, September 14

A downward trend was noticed in the local yarn market during the past week. The prices of 150D NRC, 120D NRC, 150D CR and 120D CR declined by Rs 0.13, Rs 0.14, Rs 0.27 and Rs 0.51 to Rs 52.18, Rs 54.38, Rs 51.76 and Rs 54.56 respectively. The prices of 100D SIV and 150D acetate however, remained unchanged at Rs 61.67 and Rs 48.46 respectively.

Restricted activity in jute goods

Calcutta, September 7

Activity was somewhat restricted in jute goods in the Calcutta gunny market during the past week. Buyers were few and far between but prices advanced fairly moderately during the week mainly due to speculative activity.

At a recent technical workshop on jute held here it was pointed out that the industry has to play its role in increasing its competitiveness through adoption of aggressive cost reduction exercises. Intensive research and development are necessary to arrest the erosion of existing markets. Modification of existing constructions and development of diversified uses for jute are indicated.

The recommendations made by the workshop are of considerable interest. They are aimed at matching the quantity and quality of fibre with the production and demand of the industry. The attention given to the output of fibre is justified because a substantial development is envisaged in the field of raw jute. Production of fibre may have to be increased from the present level of eight million bales to nearly 12 million bales by 1985 if an output of more than 1.5 million tonnes of goods is to be achieved during the Sixth Plan.

The investors however feel that the implementation of the recommendations will take some time to produce results. They think that it will be prudent to concentrate attention on selected jute mills which have modernised their equipment and diversified the range of production in a large measure. This explains in a large measure, the interest evinced in Birla, Anglo India, Hukamchand and Fort Gloster Mills in the stock market.

The fibre market was steady partly reflecting some buying on account of the Jute Corporation of India. But the price of jute was maintained at Rs 231. per quintal throughout. It was reported that procurement of jute by the JCI is being hindered by the slow progress in distribution of jute cards among growers. Under a policy decision, the JCI should purchase jute only from card holders. There was no death of offers from growers but the JCI could accept them only in respect of those holding cards.

Tea : CTC fannings firm

Calcutta, September 7

At the weekly leaf tea auctions in Calcutta the offerings of 27,610 packages of CTC teas met with good general demand. Dooars brokens met with good inquiry from the Gujarat and Punjab buyers. The major blenders also lent useful support. The USSR was active for grainy better made brokens. There was selective inquiry for the better sorts from the gulf buyers. All CTC fannings met with better demand and sold at firm to dearer rates. The blenders and the ARE were fairly active. There was some inquiry from the UK shippers. The Punjab and Gujarat buyers optrated for the Dooars descriptions.

The 9,703 packages of Darjeeling teas offered met with better demand. The clean Darjeeling whole leaf grades met with better demand from the USSR and realised fully firm to dearer rates. The other traditional exporters operated selectively. Bolder varieties were also well absorbed by one of the blenders and their prices were steady. Better brokens came to a firm market, being readily absorbed by the USSR for the larger varieties with support from the UK and internal buyers. Poorer sorts tended slightly easier. Fannings followed a similar trend being absorbed by one of the UK buyers and the local dealers.

The 57,529 packages of orthodox teas offered met with good demand. Plain and medium brokens met with good demand and sold at fully firm rates. The USSR was active with Poland lending fair support. There was selective inquiry from Iran for the better lines on offer. Better whole leaf grades sold at barely steady rates. The USSR continued to dominate the market with some support from Iran for the better sorts. Medium and plain descriptions met with reduced inquiry from Afghanistan and sold at barely steady levels. Fannings met with good demand from the ARE and the major blenders and sold at firm rates.

The 19,335 packages of dusts offered at the sale met with a good demand. Assam CTC dusts met with good inquiry from the blenders and the western India buyers. There was also useful support forthcoming from the local Calcutta buyers for the small descriptions. The ARE operated. Dooars dusts were well supported by the blenders, ARE and internal buyers. Exportable Pekoe dusts met with good support from the UK buyers and the blenders. Orthodox dusts met with good demand from the blenders and ARE with selective inquiry from the internal dealers.

Weather conditions in most tea growing districts remained favourable throughout the week and leaf intake was reported to be good. Growing conditions in Upper Assam, Sibsagar and Jorhat districts have been extremely favourable during the last fortnight and the crop during the latter half of August has been reported to be satisfactory. Cachar, however, reported a slight set back and leaf intake has been slightly lower than at the same time last year.

With orders not forthcoming from outmarkets and uncertainties of getting payments inhibiting an exporter from accepting orders from a third source, the outlook for packet tea exports as of now is far from promising. The loss of orders from three sources can easily be placed at around nine million kg and if one is to go by the indications available with the segment of the packet tea export trade, which usually services orders from these

DHRANGADHRA CHEMICAL WORKS LIMITED

NOTICE

IT IS HEREBY NOTIFIED FOR THE INFORMATION OF THE PUBLIC THAT DHRANGADHRA CHEMICAL WORKS LIMITED PROPOSES TO MAKE AN APPLICATION TO THE CENTRAL GOVERNMENT IN THE DEPARTMENT OF COMPANY AFFAIRS, NEW DELHI, UNDER SUB-SECTION (2) OF SECTION 22 OF THE MONOPOLIES AND RESTRICTIVE TRADE PRACTICES ACT, 1969, FOR APPROVAL FOR THE ESTABLISHMENT OF A NEW UNDERTAKING FOR THE PRODUCTION, SUPPLY, DISTRIBUTION OR CONTROL OF 1,200 MT PER ANNUM OF STAINLESS STEEL SHEETS, OTHER PARTICULARS OF THE PROPOSED UNDERTAKING ARE AS UNDER:

(i) Name of the proposed undertaking : **DHRANGADHRA CHEMICAL WORKS LIMITED**

(ii) Name(s) of person(s) or authority/authorities proposing to establish the new undertaking. Where it is a body corporate furnish details of its management structure together with those of the proposed undertaking. : Dhrangadhra Chemical Works Limited which is managed by Managing Directors under the supervision and control of the Board of Directors, namely:

Shri Sahu Shriyans Prasad Jain (Chairman)
Shri H. H. M. Sriraj Dhrangadhra
Shri A. K. Roy
Shri Gopaldas P. Parikh
Shri Dharma Vira
Shri Radhakrishna R. Ruia
Shri F. H. Tapia
Shri K. M. Philip
Shri Prem Chand Jain
Shri D. G. Ramaiah
Dr. G. P. Kane
Shri Gian Chand Jain (Managing Director)
Shri Shashi Chand Jain (Managing Director)

The new undertaking will be managed by the Managing Directors under the supervision and control of the Board of Directors. If necessary, a new Managing Director may be appointed to look after the new undertaking subject to the approval of the Government of India.

(iii) Capital structure of the applicant person or authority and of the proposed undertaking

SHARE CAPITAL:

Authorised Capital:		
1,00,000 Preference Shares of Rs. 100/- each	1,00,00,000	
2,50,000 Equity Shares of Rs. 100/- each	2,50,00,000	3,50,00,000
Issued, Subscribed and Paid up Capital:		
2,591—11% (subject to tax at source) Cumulative Redeemable Preference shares of Rs. 100/- each fully paid up	2,59,100	
25,000—9.5% (subject to tax at source) Cumulative Redeemable Second Preference shares of Rs. 100/- each fully paid up	25,00,000	
35,000—9.5% (subject to tax at source) Cumulative Redeemable Third Preference shares of Rs. 100/- each fully paid up	35,00,000	62,59,100
2,34,774 Equity Shares of Rs. 100/- each fully paid up	2,34,77,400	
Add: Forfeited Shares	200	2,34,77,600
		2,97,36,700
140—7.8% Cumulative Redeemable Preference shares of Rs. 100/- each not surrendered by shareholders for redemption		14,000
		2,97,50,700

(iv) Proposed location of the new undertaking : Pondicherry

(v) Brief outline of the cost of project, the scheme and source of finance : Estimated cost of the project Rs. 300 lakhs. The project is intended to be financed partly from our own resources, partly from borrowings and incentives available from State authorities for backward area.

Any person insterested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this notice, intimating his view on the proposal and indicating the nature of his interest therein.

Dated: 31st August, 1981.

Registered Office:

Dhrangadhra-363 315
Gujarat State

For **DHRANGADHRA CHEMICAL WORKS LIMITED,**

SHASHI CHAND JAIN
Managing Director

urces, the next six-eight eeks will show to what ex- nt the situation can be re- ieved. Libya taking five mil- on kg in the last two years r instance has not yet plac- l any order on the Tea Trad- g Corporation. Poland is also it of the packet tea market id in the case of Afghanistan, part from the uncertainties of etting payment, a contribu- ry factor reportedly is the ability of the Afghan autho- ties to take tea out of Kabul r distribution in the country.

roundnut, oil harden

Bombay, September 14

Groundnut and its oil hard- ded in the oilseeds market iring the past week on encou- ging advices from producing ntres. The inflow of oil om the south was at a low b while local demand was od. Groundnut Karad bold, urashtra bold and Saura- tra quality advanced by Rs each to Rs 630, Rs 635 and 640 respectively per 100 kg. s oil spurted by Rs 6.24 to 157.04 per 10 kg. About a rtnight ago the price had me down to as low as Rs 9.24.

With the release of more ota by the Government to nsumers, especially to vanas- ti manufacturers, imported s showed a sagging tendency. lmoleine dropped by Rs 3.12 Rs 140, and RBD by 86 ise to Rs 114.14 per 10 kg. yabean was, however, steady Rs 132.08 per 10 kg.

Castorseed ruled steady. Its s were, however, a shade ter on higher advices from derabad and Ahmedabad. dras small and Kanpur bold re steady at Rs 318 and Rs per 100 kg. Castor com- rcial oil and castor BSS oil ged up by 50 paise each to 68.50 and Rs 73.75 per 10 respectively.

little better tendency was iced in linseed and its oil. e former improved by Rs 2 Rs 530 per 100 kg and the ter by Rs 3.12 to Rs 128.96 10 kg.

mong cakes, groundnut ex- ler was in demand by Rs 25 her at Rs 1,850 per tonne castor Rs 20 at Rs 800. oil and cottonseed were lected at the previous rates Rs 1,500 and Rs 1,625 res- tively per tonne.

omparative prices in rupees quintal of seeds and per 10 of oils :-

	12-9-1981	5-9-1981
nut Karad old	630.00	620.00
nut oil	157.04	150.80
t. Md. Sm.	318.00	318.00
t. oil com.	68.50	68.00
t. oil BSS	73.75	73.25
seed bold	530.00	530.00
seed oil	128.96	125.84

Grains steady

Bombay, September 14

A steady tendency featured trading in the local grains market during the week under review.

In cereals, wheat (superior) ruled steady at Rs 270-295 per quintal on good inflow. Demand was slack. Advices from the producing centres were subdued. Buyers were cautious. The Saurashtra variety hardened by a rupee at Rs 210-235 per quintal.

Activity in rice was restricted. Owing to the fag-end of the season buyers were reserved. Arrivals averaged 1,200 bags mainly from the South. Export demand was slack. The basmati variety was steady at Rs 500-700 per quintal and Surti Kolam was quoted at Rs 340-400 per quintal.

In coarse grains, business was poor because of limited arrivals. Prices ruled steady. Jowar was traded at Rs 190-235 per quintal, bajra at Rs 190-250 per quintal and maize at Rs 185-190 per quintal.

Among pulses, gram increased by rupees eight to Rs 390-405 per quintal. Arrivals averaged 200 bags per day. Masoor dal firmed up by Rs 15 to Rs 485-495 per quintal. Moong receded by Rs 45 to Rs 400-410 per quintal on comfortable inflow of new crop, averaging 800 bags per day. Tur dal and urad (Khandesh) maintained last week's levels of Rs 450-575 per quintal and Rs 310-315 per quintal respectively.

Sugar recovers

Bombay, September 14

The decline in prices in the preceding week was reversed when prices moved up as up country buyers became active. The price of sugar C-30 firmed up by Rs 26 to Rs 542-565 per quintal. Firm offerings on account of depleted arrivals pushed up the prices. The weekend stocks improved from 1,111 bags to 3,354 bags. The price of C-30 as on September 12, was lower by 296 per quintal than the corresponding price a year ago.

Trading in Khandsari was restricted. The weekend stock was placed at 603 bags.

Mixed trend in foodgrains

Hapur, September 14

Mixed conditions were witnessed in foodgrain market during the past week. Wheat and maize recorded fresh gains while gram and rice sought lower levels. Standing kharif crops mainly juwar, guwar, bajra, munji and maize were adversly affected due to continued drought conditions.

Wheat hardened by Rs 5 to 10 per quintal on brisk Delhi support in face of poor receipts. Wheat average was now placed at Rs 137-148 and white farm between Rs 150-155 per quintal. Daily arrivals averaged 400 quintal.

Rice market, however, ruled easy on poor buying support and fresh arrivals from producing areas of Gangapar district. Standing munji and paddy crops were now reported uncertain due to failure of monsoon. Weekend prices were : Basmati sela Rs 475-500; mainpuri sela Rs 260-265; gadda Rs 220-222 and munji Rs 115-125 per quintal.

In coarsegrains, gram prices further declined by Rs 5 per quintal on easy advices from Haryana, Punjab and Rajasthan. Demand too reported slack. Gram was now quoted at Rs 320-360 per quintal according to quality. Maize, however, ruled steady on good demand for feed purposes. Some demand was also reported from Bihar and Delhi side. Prices moved up by Rs 2 per quintal to be quoted now at Rs 130-137 per quintal according to quality. Barley ruled quiet while bejhar tended to ease on poor buying support. Other coarse cereals prices were almost listless in limited trading.

In pulses peas ruled steady on slack buying and some demand from millers for conversion into dal. Peas dara was now quoted at Rs 350-360 and white farm at Rs 370-400 per quintal. Arhar, urd and other dal prices were almost stationery as trading was at a low ebb. Weekend prices were :—Barley Rs 118-125; bejhar Rs 130-137; juwar Rs 180-200; guwar Rs 270-280; methi Rs 300-325; oats Rs 220-230; peasdal Rs 475-490; arhar Rs 250-300; dal Rs 400-425; urd Rs 290-295; dal Rs 335-350; moong Rs 325-340; dal Rs 430-440; masoor Rs 335-350; dal Rs 440-450 and gramdal Rs 440-460 per quintal.

Downtrend in metals

Calcutta, September 7

A downward course in prices marked trading in the non-ferrous metals market in Calcutta during the past week as bullish pressure weakened in the wake of discouraging advices from abroad and further deterioration in the power situation in West Bengal which has nearly paralysed industrial output in the medium and small scale unit.

Seasonal slackness in upcountry demand and fairly regular releases by the canalising agency, Minerals and Metals Trading Corporation, partly accounted for the downtrend. However, releases of indigenously produced metals were again disrupted by the power cuts imposed on smelters located in Rajasthan, according to industry sources.

Among the virgin metals, copper ended the week on a quietly steady note with the wirebar unchanged at Rs 3,600 a quintal. Speculation was rife in market circles on the prospect of a hike in MMTC's selling prices. On the London market, copper drifted lower due to commission house liquidation.

Zinc electrolytic ingot closed the week in local trading at around Rs 1,900 a quintal despite poor industrial demand. The worsening power situation has hit galvanising activity in the State. The offtake of alloy manufacturers was also negligible. However, scattered bullish support was in evidence. On the IME zinc followed copper under speculative liquidation.

In moderate trading, lead ingot finished the week at Rs 1,380 a quintal but the volume of business in physical metal was restricted by poor consumer support.

Gold and silver up

Bombay, September 14

A modest rise in gold and buoyancy in silver marked the trading in the Bombay bullion market during the past week.

Standard mint gold which opened at Rs 1,752 per 10 gms increased further to close at Rs 1,755 per 10 gms. Ready silver (.999 fineness) opened at Rs 2,730 per kg and short up to Rs 2,790 per kg before closing at Rs 2,770 per kg.

Money stringent

Bombay, September 14

Conditions were tight in the Bombay short-term money market during the past week. Interest rates oppened at nine per cent and fluctuated between nine per cent and ten per cent. The market closed at ten per cent.

Aggregate deposits cross Rs 41,000-crore mark

Bombay, September 14

With the increase of Rs 85.15 crores, aggregate deposits of all scheduled commercial banks crossed the Rs 41,000-crore mark to reach Rs 41,073.11 crores during the week ended August 4, 1981. Bank credit contracted by Rs 26.44 crores to Rs 2,676.37 crores. Banks' balances with the Reserve Bank of India (RBI) increased by Rs 211.04 crores to Rs 4,754.36 crores and their borrowing from the RBI increased by Rs 13.56 crores to Rs 575.16 crores.

Beyond headlines

Bank funds for rural development

By NAVIN CHANDRA JOSHI

THE Estimates Committee of Parliament has in a recent report deplored the continuing reverse transmission of funds from rural branches of banks to the urban and metropolitan centres. The Committee has regretted to note that the credit-deposit ratio in rural areas continues to be unsatisfactory. This has happened in spite of the fact that the public sector banks were advised to step up disbursal of credit through their rural and semi-urban branches to achieve a credit-deposit ratio of at least 60 per cent by the end of March, 1979. The Committee has therefore asked the Government to take urgent steps to arrest the trend of reverse transmission of funds by rural branches so that funds generated in rural areas are deployed largely for the development of these areas.

It is now almost a decade since we started with the experiment of financing priority sectors in our rural economy. With increased emphasis placed on growth through agriculture, rural credit became the kingpin of development in its catalyst role. The rural leadership today complains that commercial banks do not handle effectively the whole complex of bank credit to meet the demands of the major portion of the rural population. The low credit-worthiness of the poor comes in the way of its meeting genuine needs from banks. Besides, the needs of rural population are so many that they call for a co-ordinated package deal by both the financial institutions and other government agencies, not just the grant of credit. Perhaps, the whole power structure in our villages needs to be changed in favour of the weaker sections.

The present position of rural leadership has helped perpetuate the feudal system in rural areas. Consequently, the benefits from banks could not reach the classes that were intended to be benefited after the nationalisation of the major banks. Commercial banks, on their part, have been trying to metamorphise the rural scene by involving themselves in village development. It must also be said that there have been quantitative achievements in some directions but as the rural scene is not so simplistic, it needs much more effective, sustained and consolidated programmes in an integrated manner.

Studies on farm loans have revealed that bank loans are repaid sooner and with more consistency by the socially depressed groups than by higher caste and rich farmers because the latter believe that they can get away with it. The village moneylender still has his influence and hold over small farmers and poor farm labourers some of whom do not get liberated from the burden of loans. The government should think of some ways by which such persons are freed from the clutches of moneylenders. Funds provided by the rural co-operative sector have also gone to rich farmers. No wonder that the moneylender has dominated the rural finance scenario even though he acts with dishonesty and charges very high rates of interest. The bane of the co-operative movement in the country has been that its benefits have been cornered by a privileged few who controlled the co-operative societies, depriving the less privileged members for whose benefit the movement was actually started.

In the above context, diversion of rural deposits to urban centres is quite deplorable though its impact would be felt only after some years in the form of low growth in rural areas. The diversion has also caused a reduction in banks' lending in rural areas and as such, the credit-deposit ratio for the banking industry as a whole has fallen in recent years. The Estimates Committee has made a useful recommendation that surveys to quantify the credit needs of rural population be conducted every five years so that the information collected could be utilised while drafting five year plans.

It may be noted that, while for big farmers credit may be a useful adjunct to their owned funds, for small and marginal farmers it is of overriding importance for the growth of agricultural productivity. Such credit cannot be obtained from the usual market sources. Loans from moneylenders entail a high rate of interest and small farmers cannot afford to pay it. In our economy, the mark rate of interest is not independent of t profitability of investment. If the fa mers, taking advantage of high rate return on investment, decide to borro from the market sources, the rate of int rest thereof may very soon chase t rate of return and thus increase t burden of other compulsive loans li the one incurred for consumption. P vate moneylenders deliberately e courage default so as to take over t land which is the usual security.

It may be emphasised that far financing is essentially a supervis credit. Supervision should form essential ingredient from the time disbursement of a loan till it is repai It is in the interest of both the bar and the borrower that the loan is utilis for the purpose for which it is mear Farm finance is, in fact, an activi which has a definite socio-econom function to perform. While a lar section of farmers belong to the cat gory of small and marginal farme there are about eight crores of agricu tural labourers in the country. The interest could be safeguarded by bank involving themselves in schemes lik SFDA/MFALDA, 20-point econom programme, DRI and such other schem as formulated by the government fro time to time for helping the rural poor

Another important aspect in rur finance is that there are at present number of sick units in the rur sector. They are in utter need financial and other assistance. Th term-lending institutions do not part cipate in rehabilitating them unless involves fresh capital investment programme and even then their assistanc is restricted to acquiring fixed assets. I other words, banks are not stepping merely because there is a need for long term funds. Hence, they nee active co-operation of term-lendin institutions (development banks) fo putting sick units back on their fee as the problem has now assumed gigantic proportions.

Without belittling the variou efforts of the Government and the banking sector, it would be right to say tha the endeavours made so far have no touched even the outer fringe of th rural population. It is high time tha our banks are used as social instrument for accelerated economic progress an surely, in the rural sector this objective can be achieved through agricultura finance and its optimal deployment fo rural growth.

Mr Joshi teaches at Motilal Nehru College, University of Delhi.

COMMERCE

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EDITOR: VADILAL DAGLI
ASSOCIATE EDITORS: D. B. MAHATME
SUBHASH CHANDRA SARKER

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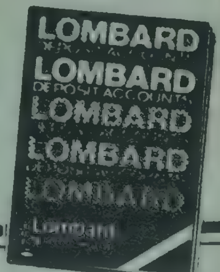

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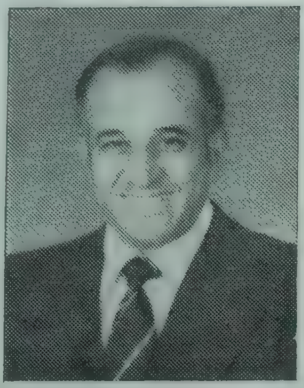
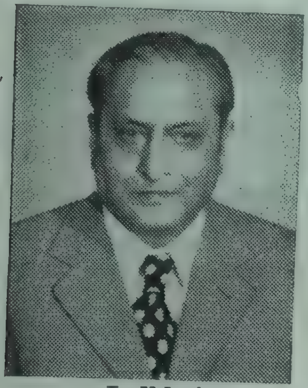
PEOPLE

Mr Chandrakant C. Sheth has been elected president of the Bombay Fountain Pen Manufacturers and Traders Association.

Mr K. Rajagopal, managing director of Lakshmi Mills Co Ltd, Coimbatore, has been re-elected chairman of the Indian Cotton Mills' Federation for the year 1981-82. Mr Rajagopal, who has a B.S. (Textiles) from the Philadelphia College of Textiles and Sciences to his credit, is also currently connected, as director, with several textile units.



Rajagopal



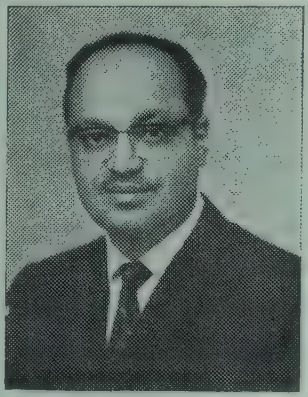
Lalbhai

Mr M. K. Bagai has taken over as marketing director of Hindustan Petroleum Corporation Ltd.

Mr Arvind Narottam Lalbhai, managing director, Arvind Mills Ltd, has been re-elected deputy chairman of the ICMF. Mr Lalbhai is also president of the Federation of Indian Chambers of Commerce and Industry. He headed the Ahmedabad Millowners' Association thrice and has been on the managing committee of several public and professional institutions.

Mr S. K. Ojha, president, Kesoram Spun Pipes & Foundries, has been elected chairman of Cast Iron Spun Pipe Manufacturers' Association.

Mr Kantikumar R. Podar has been re-elected vice-chairman of the ICMF. Mr Podar, who had been chairman of the Millowners' Association, Bombay, from 1976-78, was Sheriff of Bombay in 1974 and is on the committees of the All India Association of Industries, FICCI, and Maharashtra Labour Welfare and National Labour Institutes.



Podar

Adya

Mr Varadaraj Adya, vice-president, Personnel and Public Relations, Mafatlal Fine Spinning and Manufacturing Co Ltd, Bombay, has been elected chairman of the Audit Bureau of Circulations for 1981-82. Mr P. K. Roy, Mr S. R. Ayer and Mr N. M. Dugar were elected respectively deputy chairman, honorary secretary and honorary treasurer.

Mr B. K. Kedia, executive director, Raymond Woollen Mills Ltd, has been re-elected chairman of the Indian Woollen Mills' Federation for 1981-82.

Dr Prakash M. Parkhe, joint managing director of Paper & Pulp Conversions Ltd, Pune, has taken over as managing director. Dr Parkhe is also a member of the executive council of the Mahratta Chamber of Commerce and Industries.

Parkhe

THE WEEK

Six European shipping lines have formed a c sortium styled "COBRA" (Continental and Brit lines), to operate from November 1 this year a fo nightly container service on a liner basis on the Ind UK-Continent route. The consortium will ope compete with Indian Containers Ltd (ICL) comprisi the Shipping Corporation of India, the India Stea ship Company and the Scindia Steam Navigati Company.

The Union cabinet on September 18 fixed t procurement price of paddy for the forthcoming kha crop (1981-82 marketing season) at Rs 115 per qu tal as recommended by the Agricultural Prices Co mission.

★

The Union Government has set up Cement Pri rity Committee to allocate cement among the vario priority sectors such as coal, petroleum, steel, irrig tion and power. The committee is headed by Mr S. I Ghosh, Secretary in the Department of Industri Development, and will start functioning from Oct ber 1.

★

India and Botswana have signed a memorandu of understanding in the field of economic develo ment, particularly in the development of small sca industries. India would assist in the establishment a comprehensive structure for the development small scale industries.

★

The Union Finance Ministry has exempte cotton from import duty with effect from Septemb 21, 1981. About 50,000 bales of cotton are to be im ported immediately from Pakistan.

★

The Union Government has permitted the Ste Authority of India to import, as the canalising agency two lakh tonnes of pig iron under the buffer scheme The first instalment of imports is expected by Nov ember end this year.

★

Industrial production in India has registered growth rate of 11.1 per cent in the first quarter of th current year, according to Union Industries Minister Mr N. D. Tiwari.

★

The Union Agriculture Ministry has earmarke Rs 111 crores for immediate distribution as short-term loans to states for purchase and distribution of agri cultural inputs like quality seeds, chemical fertilisers and pesticides.

★

The Government has sanctioned a loan of Rs 18 crores for the Rural Electricity Corporation for 86 new projects which will help electrify 1,600 villages in 12 states.

★

Wholesale price index

At 284.8, the latest available wholesale price index for the week ended September 5, 1981 showed a decline of 0.5 per cent over the preceding week. However, at this level the index was higher by 8.9 per cent than its level a year ago.

Money stringent

Conditions were comfortable in the Bombay short-term money market as of Monday (September 21, 1981). In the inter-bank call section, both notified and commercial funds were renewed at 9.5 per cent and 9 per cent. Fresh money was transacted at 9 per cent. The market closed at 9 per cent

COMMERCE

American domination of World Bank

THE US Government has all along played a disproportionately dominant role in the affairs of the International Bank for Reconstruction and Development, popularly known as the World Bank, right from its inception in the mid-40s. At the end of June 1981 the US Government's subscription to the capital stock of this Bank stood at a little over 23 per cent and it provided a little over 17 per cent of the borrowings by the Bank. The US contribution to the working of the IDA, the World Bank's soft-loan affiliate, which has played a positive role in the economic development of the poor countries, was more substantial, as it provided about 31 per cent of the total subscriptions and supplementary resources. The President of the World Bank has invariably been an American citizen. The World Bank has very much responded to the inclination of the US Government and also of the American President of the Bank. The US has got more from the world bank than it has given. A new dynamism was injected into the working of the World Bank by Mr Robert McNamara, who retired as President earlier this year. He gave a direction to the working of the World Bank which made it more relevant to the interests of the poor countries and their poorest citizens than the Bank's working had been at any time before. It is no surprise that the World Bank has come to evoke new hopes from the poor countries. However this happy turn seems to have come to an end.

The change of the presidentship of the Bank, which is now headed by Mr A. W. Clausen, who left his number one position in the Bank of America to head the World Bank, has already made its impact felt to the utter disadvantage of the poor countries. There is no doubt, however, that the sudden stinginess displayed by the US Government in providing funds to the World Bank has been a factor in this deterioration. The US contribution of $ 3,240 million to the sixth replenishment of the International Development Association will be paid in three instalments—but not in equal amounts but only $ 540 million would be made available in the first year, $ 850 million in the second year and the balance $ 1,850 million in the third year.

As a result, the IDA concessional lending will have a more restricted role in the first two years than it really needed to be. This would increase the reliance of the borrowing countries on the more expensive World Bank loans to make up for the reduced share to IDA finance. The World Bank has already raised the lending rate thrice during 1981. The lending rate is now 11.6 per cent. There is a threat that the lending rate may still be further enhanced. The Reagan Administration was reportedly considering a proposal to cut US contribution to the international lending organisations like the World Bank starting from 1984 and to bring about a thorough overhaul of their lending policies. The USA might make a bid to eliminate the IDA after 1984. The draft proposals—the result of a seven-month study—also affect the Asian Development Bank and other international financial institutions. The US Government under Mr Reagan and, following him, Mr Clausen, the World Bank President. are of the opinion that the developing countries should obtain funds for development from the capital market. The point is that if the developing countries could afford the high cost of borrowing from the capital market they would not have looked up to the World Bank for funds and such advice would be redundant. Without that capacity to borrow from the capital market the suggestion comes as a great affront.

The *World Development Report* 1981, published by the World Bank in August, noted that the growth of the developing countries in the eighties would depend, among other factors, on "their ability *to increase the inflow of external capital* and to raise the rate of domestic saving in order to finance investment aimed at restructuring their economies." (Italics added) From where are the developing countries to get capital, if not from the developed countries of the rich West including the USA and the West European countries? At constant prices the oil importing developing countries have been able to effect savings at the rate of about 20 per cent of the GDP during the seventies. According to the projection of the World Bank, the utmost these countries may be able to do in the field of saving during the eighties would not be significantly different from what they have achieved (21.4 per cent) in 1980. Thus the main thrust has to be towards obtaining external capital.

The Foreign Minister of Sweden told the United Nations Conference on the Least Developed countries in Paris earlier this month, "The least developed countries are faced with an international economic situation they themselves neither caused nor can do much to influence. And these are the very countries that can least afford to cut back programmes against poverty and hunger". This is the reality. Logically enough, the Swedish Foreign Minister correctly noted the obligation of the two economically most powerful countries—the USA and the USSR—to come forward to help the poor countries, "A special request must be directed to the United States and the Soviet Union. At a time when the least developed countries are faced with an increasingly disastrous situation, the two super-powers are engaged in a race for military superiority", the Swedish Minister noted.

India faces the unenviable need to divert more funds for defence—primarily because of the infusion of the arms race into neighbouring Pakistan. The costly mistakes in China and subsequently in Vietnam have not, apparently, taught the US Establishment any lesson so that it has embarked upon another arms race in Asia. If, instead of providing F-16 planes which can do no good to the poor in Pakistan, the US Government had provided Pakistan with development assistance it would have brought about a degree of welfare which is otherwise just inconceivable. The question must be faced: Why should USA time and again inject strife and instability in South Asia, where the largest number of the world's poor live? The US military budget, as the Swedish Foreign Minister so relevantly pointed out in his address, is almost ten times higher than the official development assistance (ODA) provided by all the countries of the Organisation for Economic Co-operation and Development (OECD). There is no doubt that the same relationship exists in the Soviet Union. This also underlines the obligation of the Soviet Union to provide larger funds for the development of the poor countries by joining the World Bank and actively assisting the replenishment of IDA.

The rate of growth of individual countries is important. For on the attainment of a satisfactory rate of growth alo depends the possibility of the developing countries com out of the morass of poverty and underdevelopme However, any programme of action for the betterm of the developing countries must take into accou the growth rate over a period longer than one ye For example, if in one year a country has a poor rate growth, even the normal rate of growth in the subseque year may show a very high rate of growth, although for t welfare of the people of the country the so-called high-ra of growth may mean little. On the other hand, even a lo rate of growth in a prosperous economy may bring in a f greater degree of welfare to the people in that country. T World Bank's factual statement in the annual report for t fiscal year 1981 that the economic growth during 1980 in t developing countries outpaced growth in the industrial cou tries by more than three-fold needs to be evaluated in th light. As is well-known, the distance between the prosperi of the developed countries and that of the developing cou tries has been widening, which means that the develope countries have been growing faster than the developin countries. This is why India should play an aggressive ro at the forthcoming Fund-Bank annual meeting to combat th anti-poor world American domination of the World Bank

Textiles : Fortunes slump again

ONCE again the fortunes of the cotton textile industry have slumped after a comparatively prosperous brief respite of three years. According to Mr K. Rajagopal, chairman of the Indian Cotton Mills' Federation (ICMF) most of the mills are currently exposed to cash losses with realisation on sales of cloth and yarn lagging considerably behind the cost-push. The reasons are not far to seek. The industry's principal raw material has become costlier with cotton prices having shown a smart rise of nearly 37 per cent in January to June this year over the corresponding period of the previous year. The multi-fibre policy implying part use of man-made fibres for cotton has also not worked satisfactorily with industry complaining about costlier indigenous fibre and still more costlier imported fibre. Inflationary pressures have meant that the industry has been forced to pay higher and higher dearness allowance to its employees, pushing up the wage costs. Coal, fuel, oil and electricity charges have been raised by the authorities and chemicals and stores have become dearer too. The cost of production of cotton cloth in Bombay mill industry has reportedly risen by as much as 26 per cent during the current year compared to only 8.50 per cent in 1980 over 1979. The private mills have been freed from the controlled cloth obligation but the industry as a whole subsidises the scheme to the extent of over Rs 100 crores, of which Rs 80 crores to Rs 85 crores come from the cotton mills alone through the 15 per cent *ad valorem* surcharge on excise. True, cloth prices have risen and th common man nurses a grievance about them and rightly too But according to industry prices have not kept pace with rising cost of production partly because of the resistance tc higher prices of cloth itself and partly because the common man has to pay higher prices for other daily necessities.

The cotton balance-sheet for the season that has begun last August does not look a healthy one. The carryover has been just 13.50 lakh bales, which is a much short of three months' estimated requirements of mills of 20 lakh bales. The season's yield is also not placed beyond 80 lakh bales and the supply position promises to be tight. Consequently cotton prices should continue to be firm unless there are imports of short and medium staple cotton and the industry can make greater use of long staple cotton. Unfortunately, finer cottons are now being exported with mills not lifting their stocks and growers of such variety as Suvin suffering in the process. The industry has a grievance that the structure of excise duty on fabrics creates hurdles with the levy rising sharply as the average count of cloth rises beyond 40s. This may not be the whole explanation but the complaint of the industry must be examined carefully by the Government for the same volume of finer cotton yields larger metreage of cloth. Mr Rajagopal has drawn the pointed attention of the Government to the recommendation of the Jha Committee on Indirect Taxes that a tax on cotton fabrics should be based on the price before tax, with the least rate of tax to be applied to the cheaper varieties of cloth.

The cotton textile industry has been planning its rehabilitation and modernisation of obsolete machinery for a long time but apparently not much progress has been made. Modernisation has been considered essential from export point of view but more efficient machinery is equally important if the industry is to have some sort of check on rising costs of production. As Mr Rajagopal has commented it is rather sad that, in the year of MFA negotiations, India's fulfilment of quotas of fabrics to the EEC and the USA has woefully lagged behind. This is not all. Exports of cotton cloth during 1980-81 were of the order of only 300 million sq metres, the lowest in several decades, though exports of cotton textiles including garments and hosiery goods, rose, as Mr Rajagopal pointed out, from Rs 786 crores in 1979-80 to Rs 874 crores in 1980-81. Exports need to be diversified, particularly into the field of blended and synthetic items but this will not be possible till modernisation for the entire industry is complete or we develop at least a few fully export-oriented mills. Mr Rajagopal has complained that the Industrial Development Bank of India has virtually withdrawn its soft loan scheme and that the hike in interest charges for term loans has also given a setback to the mills' modernisation tempo. He has proposed that the least that the authorities could do to gear up the pace of modernisation to is to restore the original scheme of soft loan scheme, with the concessional rate of interest as an important component and financing of overrun in project cost in a realistic manner. This is rather too much to expect from the IDBI particularly when the financial institutions are suffering from constraints of finance. But the Government must find a way out as in the face of widening trade gap year after year, textiles, as the chairman of the ICMF has said, could be one of the leading items in our efforts to augment the foreign exchange resources. (See also page 553).

Salem : A white elephant ?

THE Steel Authority of India (SAIL) can take some comfort from the fact that the first stage of Salem Steel Plant to produce annually 32,000 tonnes of cold rolled stainless sheets was commissioned on time on September 13. But 54 months was a long lead period and the first stage, though commissioned in this lead time, has taken 11 years to materialise since the Prime Minister, Mrs Indira Gandhi, inaugurated the work for an integrated flat rolled stainless steel plant in 1970. Some misgivings have been expressed on whether the Government would develop the Salem plant into an integrated one and the assurance of Mr A. S. Gill, secretary to Ministry of Steel, on the occasion of the inauguration of the cold rolling mill should serve to clarify the Government's intentions. Mr Gill has asserted that the Government was serious in implementing the Salem steel project in the form of an integrated steel plant as originally conceived.

Apart from the completion of the first stage on schedule two other favourable points deserve to be mentioned. First, as Mr K. C. Khanna, chairman of SAIL pointed out, taking into account the addition to the scope of the plant the revised estimate of Rs 167 crores with the earlier estimate of Rs 127 crores could not be called unreasonable. So there were no overruns in costs which are normally associated with public sector projects. Secondly, there has been no surplus labour employed which is the malaise with the earlier five integrated steel plants. The argument has always been that the employment provided should be in proportion to the huge investments made which, in a country like ours, with so many millions unemployed, looks reasonable. But the surplus staff unnecessarily pushes up the cost of production of steel without bringing in efficiency, and Salem seems to have learnt the lesson. It has a work force of not more than 1,000 with 600 of them in plant proper. The steel plant can of course contribute indirectly to employment through the downstream units which can convert into the end-products the stainless steel produced by the plant.

But all these factors cannot outweigh the fact that Salem promises to be a white elephant from the word 'go'. Currently its production is based on imported hot rolled coils on which the customs duty is as high as 325 per cent. On this basis the cost of production would work out to Rs 83,000 per tonne as against the market price of cold rolled sheets of Rs 56,000 per tonne. The annual loss on the production of 32,000 tonnes would run into as much as Rs 86 crores. Mr Khanna has explained that the original plan for Salem was drawn when the import duty on hot rolled coils was only 75 per cent, and SAIL has represented to the Government to substantially reduce the burden of customs duty. The Government could accede to the request fixing a duty of 75 per cent on hot rolled coils imported by SAIL just as in the case of edible oils there is a substantial difference in duty on oils imported by the STC and those imported by the private trade. In this connection it has been proposed that the slabs produced by continuous casting process by Durgapur Alloy Steel Plant could be rolled into hot rolled coils at Bokaro and supplied to Salem for cold rolling. Its economic implications have apparently to be studied. But it is equally important that dependence on imports for Salem has also to be avoided. As suggested by SAIL also, the Government must immediately stop imports of finished cold rolled products so as to help create demand for Salem products.

Leap into the steel age

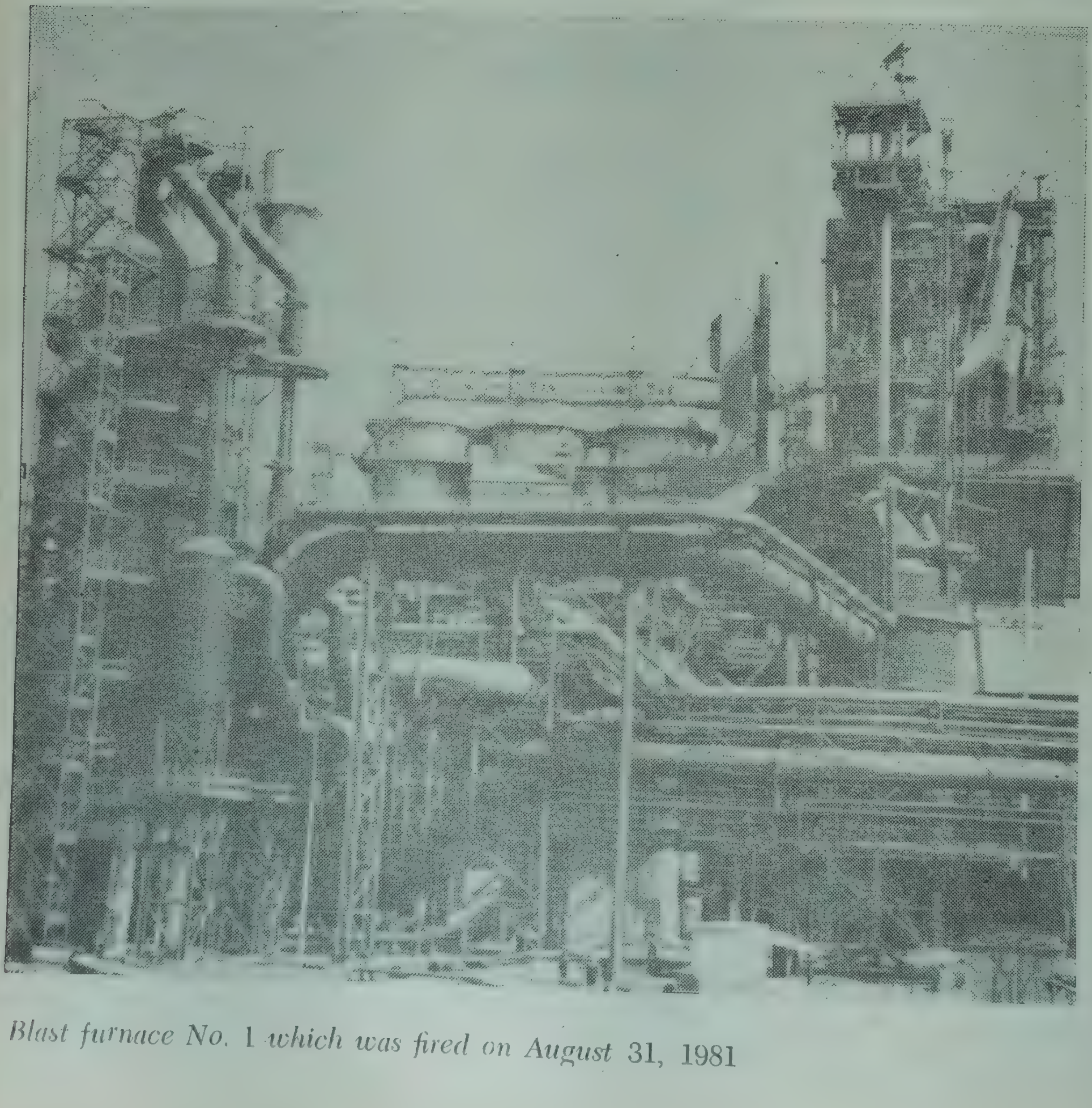
By KHALIQUE ZUBERI

PAKISTAN entered the group of world steel producers with the inauguration of the first blast furnace of the Pakistan Steel Mills on August 31, 1981. The occasion coincided with the 34th anniversary of independence. The inaugural ceremony was performed by President General Mohammad Zia-ul-Haq, who described the commissioning of the project as an important milestone in the economic development of the country. The President emphasised that if Pakistan lagged behind in the development of science and technology, the coming generations would have to suffer.

Being a basic industry, the development of allied and auxiliary industries was a natural consequence which would, in their own manner, contribute to national economic development. He said the occasion marked a beginning towards self-reliance.

Pakistan Steel entered the operational phase on April 17, 1981 when the first battery of coke oven, a by-product plant consisting of 49 ovens was charged with coal and the first lot of coke was taken out on April 18. The thermal power plant (first turbogenerator) has been commissioned and has attained a load of 55 mw from April 15. Since Pakistan Steel's present internal requirement is 5 mw, the balance is being transmitted to Karachi Electric Supply Corporation for use by industrial and domestic consumers of Karachi city.

This project of national importance has had already a visible impact on certain areas of economic activity connected presently with construction and fabrication industries. When the plant goes on full stream in 1984, the economic impact of it, as a result of easy availability of basic inputs of iron and steel products, will be widespread and multi-dime
sional. Pakistan Steel will not only p
duce 1.1 million tonnes of steel
annum according to its designed capac
but will also provide a number of b
products.



Blast furnace No. 1 which was fired on August 31, 1981

In addition, valuable by-produc
like gases for generation of power, am
nium sulphate as fertiliser (17,000 to
nes), coal-tar (46,500 tonnes) and benz
will be available. A carbon black pla
which will use coal-tar has already be
constructed adjacent to Pakistan Ste
The plant is now operational. Slag w
be used by Thatta cement factory f
production of slag cement.

The steel mills has in-built capaci
for expansion to two million tonnes. I
steel industry the economics of produ
tion works as a rule of thumb. Tha
would mean that the higher the produ
tion, the lower would be the cost
production. The expansion in capacit
has been provided in the design. Initial
ly two blast furnaces are to be set u
for one million tonne capacity but th
third and fourth can also be set up a
an extension of the existing two wit
much reduced expenditure. The capa
city expansion has been strongly recom
mended by experts. The economical siz
of a steel mills is four to five millio
tonnes. In case of Pakistan where pe
capita steel consumption is nine kg a
compared to Asian average of 55 kg and
world average of 106 kg, two millio
tonnes capacity is at present regarded
feasible, but demand would increase.

Pakistan has opted for the blast furnace and LD converter process in producing steel because of the well established familiarity of this process and large scale usage all over the world. The blast furnace process is of Austrian origin which was started there in 1953. In Japan about 80 per cent of steel is produced through this method. The still more modern method is the direct reduction process which is now being adopted by countries like Saudi Arabia, Venezuela, Iran and Mexico. This is the German process and its main source of energy is gas. This system works on electric arc furnaces. In 1978, out of 752 million tonnes of steel produced all over the world, only 12 million tonnes was

Continued on page 578

World Bank and IDA operations: 1980-81

By **COMMERCE RESEARCH BUREAU**

DURING the fiscal year 1980-81 lending and investment commitments by the World Bank and its affiliates, the nternational Development Association (IDA) and the International Finance Corporation (IFC) aggregated to $13,102 million. These were higher by $ 940 million or 8 per cent against the previous year's total of $12,162 million.

Lending commitments approved by he World Bank rose by $1,165 million or 15.2 per cent in 1980-81 to $8,809 million from $7,644 million in 1979-80. These were in support of 140 projects in ifty countries.

During 1980-81, development credits approved by the IDA fell by $356 million or 9.3 per cent to $3,482 million s against $3,838 million in 1979-80. A otal of 106 projects for 40 countries vere approved during the year.

The IFC approved 56 investments vorth $811 million to 34 countries luring 1980-81, compared with 55 investments worth $681 million in the preceding year. These were higher by 130 million or 19 per cent over those n the preceding year.

The World Bank and IDA together isbursed assistance worth $6,941 million uring 1980-81, up $1,197 million or 21 er cent compared with $5,744 million he previous year. Of this, 73 per cent r $5,063 million were disbursed by the World Bank and 27 per cent or $1,878 million by the IDA.

Regional distribution

Of the total assistance approved y the World Bank and the IDA during 980-81, nineteen countries of Latin merica and the Caribbean accounted or $3,153 million or 25.7 per cent of he total assistance and ranked first ollowed by six countries of South Asia $2,531 million or 20.6 per cent); hirteen countries of Europe, Middle ast and North Africa accounted for 2,436 million or 19.8 per cent of the tal World Bank group assistance and n countries of East Asia and Pacific gion for $2,358 million or 19.2 per nt. Other beneficiaries were sixteen untries of Eastern Africa ($938 milon or 7.6 per cent) and seventeen untries of Western Africa ($874 illion or 7.1 per cent). In all 81 member countries received assistance during 1980-81 (Table 1).

In percentage terms the largest share of World Bank assistance went to Mexico which received 12.3 per cent or $1,081 million followed by Brazil 9.6 per cent or $844 million and Turkey 8.2 per cent or $722 million. The share of China which joined the World Bank group during May 1980 was only 1.1 per cent or $100 million.

India was the biggest borrower from the IDA in 1980-81 with $1,281 million. Next came Bangladesh ($334 million), Pakistan ($202 million), Arab Republic of Egypt ($198 million), Sri Lanka ($167 million), China ($100 million) and others.

Thirty three per cent of the World Bank commitments during 1980-81 were made to countries with annual per capita gross national product (GNP) of $680 or less (at 1979 prices). On the other hand, all the IDA commitments during the year were made to countries falling within this group. Of the total IDA commitments 87 per cent were made to the poorest of the developing countries—those with per capita GNP of $370 or less.

Purposewise break-up

Out of the total assistance approved by the World Bank group during 1980-81, the largest share (30.6 per cent) went to projects in agriculture and rural development followed by energy 16.2 per cent, development finance companies 9 per cent, transportation 8.6 per cent, non-project and structural adjustment purposes 8.2 per cent and industry 7.2 per cent. The remaining 20.2 per cent of the approved assistance was for projects in the fields of education, water supply and sewerage, urbanisation, telecommunications, small scale enterprises, technical assistance and population, health and nutrition. (Table 2).

The share of agriculture and rural development projects in the total assistance approved during 1980-81 increased marginally from 30.1 per cent in 1979-80 to 30.6 per cent in 1980-81. The assistance approved for non-project and structural adjustment purposes also increased from 4.6 per cent in the previous year to 8.2 per cent in 1980-81 and that of industry increased from 3.7 per cent to 7.2 per cent over the same period. Other sectors whose share in the total assistance in 1980-81 was higher as compared with that in the last year were education, development finance companies, urbanisation, telecommunications, technical assistance and oil, gas and coal. In contrast, the share of power projects in the total assistance declined substantially from 20.8 per cent in 1979-80 to 10.8 per cent in 1980-81 and that of transportation from 12.6 per cent to 8.6 per cent. The percentage share of the total assistance approved for projects in water supply and sewerage, small scale enterprises and population, health and nutrition also declined over the same period.

Table I : Regionwise World Bank loans and IDA credits : 1980-81

($ million)

Region	No. of countries	World Bank	IDA	Total	Per cent to total
Latin America and the Caribbean ..	19	3,119.0	34.2	3,153.2	25.7
Europe, Middle East and North Africa	13	2,173.2	262.6	2,435.8	19.8
South Asia	6	430.0	2,101.2	2,531.2	20.6
East Asia and Pacific	10	2,227.9	130.5	2,358.4	19.2
Eastern Africa	16	554.8	383.5	938.3	7.9
Western Africa	17	304.0	570.1	874.1	7.1
Total	81	8,808.9	3,482.1	12,291.0	100.0

Table 2 : Purposewise distribution of World Bank loans and IDA credits : 1980-81

($ million)

Purpose	World Bank	IDA	Total	Per cent to total
Agriculture and rural development	2.406.0	1,357.0	3,763.0	30.6
Energy	1,846.5	136.0	1,982.5	16.2
(a) Power	1,282.5	40.5	1,323.0	10.8
(b) Oil, gas and coal	564.0	95.5	659.5	5.4
Development finance companies	1,042.0	70.5	1,112.5	9.0
Transportation	763.0	229.8	1,062.8	8.6
Non-project	789.0	223.0	1,012.0	8.2
Industry	475.8	409.7	885.5	7.2
Education	374.6	360.7	735.3	6.0
Water supply and sewerage	433.5	101.1	534.6	4.3
Urbanization	459.0	42.0	501.0	4.1
Telecommunications	..	329.2	329.2	2.7
Small scale enterprises..	157.5	71.5	229.0	1.9
Technical assistance	49.5	81.6	131.1	1.1
Population, health and nutrition	12.5	..	12.5	0.1
Total	8,808.9	3,482.1	12,291.0	100.0

World Bank finances

The net income of the World Bank increased to $610 million in 1980-81, an increase of 3.7 per cent over $588 million earned during 1979-80.

During the financial year 1980-81, the World Bank borrowed an amount of $5068.8 million mostly in the capital markets of Europe and Japan. This excludes $646 million that had been borrowed during 1979-80 and credited to the borrowing programme of 1980-81. These borrowings include the World Bank's first public borrowing in sterling since 1971, and the first public borrowing in guilders since 1976. For the sixth year in succession the public issues and private placements continued to be the most important source of raising funds. These together accounted for $3,762.6 or 74.2 per cent of the total borrowings in the year.

As on June 30, 1981, the subscribed capital of the World Bank stood at 36,614.5 million (SDRs 31,822.1 million). The authorised capital expressed in terms of special drawing rights (SDRs) was 70,500 million. The value of the authorised capital in dollar terms (calculated on the basis of the rate computed by the IMF on June 30, 1981–1 SDR = $1.15060) was $81,117 million. On January 4, 1980, the Board of Governors of the Bank agreed to raise the authorised capital stock of the Bank by approximately $40,000 million.

Developing countries

In 1980 the real growth in the gross national product (GNP) of the oil importing and oil exporting developing countries was much higher at 4.6 per cent than the rate of 1.3 per cent achieved by the industrial economies during the same year. However, developing countries as a group grew less rapidly in 1980 as compared with the average growth rate of 5.3 per cent per annum achieved by them during the decade 1971-80.

The current account deficit of oil importing developing econom increased from $8,300 million in 19 to $39,600 million in 1975. Develo ing nations were thereby forced to sort to adjustment measures and 1978 brought down their current count deficit to $27,100 million. Ho ever, these rose again to an estimat $43,100 million in 1979 and further an estimated $70,000 million in 1980.

Net disbursement of Official Dev lopment Assistance (ODA) from mer ber countries of the Developme Assistance Committee (DAC) of t Organisation for Economic Cooperati and Development (OECD) to t developing countries increased to estimated $26,600 million in 1980. Th represents a nominal increase of 19 p cent from the 1979 level, reaching 0. per cent of their aggregate GNP. Th percentage of ODA to GNP in 1970 had remained fairly constant betwe 0.33 per cent and 0.36 per cent.

Net disbursements of ODA by th member countries of the Organisatio of Petroleum Exporting Countri (OPEC)—which had grown rapidly the early seventies and had reache $8,200 million in 1975—dropped bac to an estimated $4,300 million by 197 In 1979 these increased to an estimate $4,600 million and further by 52 pe cent to an estimated $7,000 million 1980.

According to the World Bank man developing economies had to fac difficulties during 1980-81 as a resu of recession in the industrial economie inflation, rising energy costs, high inte rest rates, low growth of world trad volatile exchange rates and declinin prices of primary products other tha petroleum. Though the main problem were similar to those faced during th 1970s there were some crucial differ ences. The current downturn cam after years of relatively slow growth mounting unemployment, and high in flation in the industrial economies Compared with the sharp recession o 1974-75 the recession of 1980-81 wa much milder, yet recovery is expecte to be slower. This is because of th difficulties in reducing inflation, no considered to be a major underlyin cause of weakness of many economies. There is thus not much cause for optimism in the global outlook in the nea future, according to the World Bank annual report for 1981.

COVER STORY

World Bank group assistance to India

By COMMERCE RESEARCH BUREAU

DURING the fiscal year ending June 30, 1981, lending commitments by the World Bank and credit approvals by its affiliate, the International Development Association (IDA), to India amounted to $1,711 million (Table 1), up $51 million (3.1 per cent) from $1,660 million in the year 1979-80. Though the IDA still accounted for the major part of the total World Bank group's assistance to India, its share declined from 92 per cent in the previous year to 74.9 per cent in 1980-81. IDA's share in the total World Bank group's assistance to India in 1978-79 was 80 per cent.

India's share in the World Bank group's total lending declined further during 1980-81 to 13.9 per cent as against 14.5 per cent in 1979-80 and 14.9 per cent in 1978-79. Now that the People's Republic of China has joined the World Bank group, India's prospects for aid from the group are likely to be adversely affected in the future. While the World Bank's absolute commitment to India increased by 244 per cent to $430 million in 1980-81 as against $125 million in 1979-80, the IDA's sanctions declined by $254 million (16.6 per cent) from 1,535 million in 1979-80 to $1,281 million in 1980-81.

However, in spite of a decline in its share of the total assistance, India still continued to be the single largest beneficiary among the recipients of aid from the World Bank group. Next came Mexico and Brazil which received $1,081 million (8.8 per cent) and $844 million (6.9 per cent) respectively.

During the year 1980-81 per capita assistance to India by the World Bank group remained steady at the previous year's level of $2.6. India also retained its last year's fourth position in terms of per capita assistance among the countries of South Asia (Table 2).

Table : I Lending by World Bank and IDA to India

	Approved during 1980-81			Approved up to June 30, 1981		
	Total $ million	India's share		Total $ million	India's share	
		$ million	Per cent		$ million	Per cent
World Bank	8,808.9	430.0	4.9	68,150.3	3,200.6	4.7
IDA	3,482.1	1,281.0	36.8	24,051.9	9,566.2	39.8
Total	12,291.0	1,711.0	13.9	92,202.2	12,766.8	13.8

Table 3: Purposewise World Bank loans and IDA credit to India: 1980-81

($ million)

Purpose	World Bank	IDA	Total	Per cent to total
Agriculture and rural development	30.0	490.0	520.0	30.4
Oil, gas and coal	400.0	—	400.0	23.4
Industry	—	400.0	400.0	23.4
Telecommunications	—	314.0	314.0	18.4
Urbanisation	—	42.0	42.0	2.4
Transportation	—	35.0	35.0	2.0
Total	430.0	1,281.0	1,711.0	100.0

Table 2: World Bank Group lending to South Asian countries 1980-81

	Total lending ($ million)	Per capita lending ($)
Sri Lanka	167.0	11.1
Nepal	62.2	4.4
Bangladesh	334.0	3.8
India	**1,711.0**	**2.6**
Pakistan	202.0	2.5
Burma	55.0	1.7

The World Bank loans and IDA credits to India helped to meet a part of the expenses of 13 projects during 1980-81, of which eight were for agriculture and rural development and one each in the fields of industry, oil, gas and coal, transportation, urbanisation and telecommunications. During the year, three sectors, namely, agriculture and rural development, oil, gas and coal, and industry together accounted for more than three-fourths of the total assistance received by India: 30.4 per cent for agriculture and rural development and 23.4 per cent for each of the sectors, industry, and oil, gas and coal (Table 3).

Up to June 30, 1981, the cumulative assistance approved to India by the World Bank group aggregated to $12,766.8 million or 13.8 per cent of the total approvals by the group. (Table 1). While India's percentage share in IDA's cumulative assistance up to June 30, 1981 declined marginally to 39.8 per cent from 40.3 per cent at the end of June 30, 1980, its share in the World Bank's cumulative assistance remained steady at 4.7 per cent the level attained at the end of June 30, 1980.

At the Aid-India Consortium meeting held in Paris on June 9-10, 1981, the consortium pledged $3,450 million assistance to India for the year 1981-82 which is marginally higher than $3,410 million pledged for the previous year. In view of the frequent fluctuations in the value of the US dollar the consortium announced the aid quantum in terms of International Monetary Fund's Special Drawing Rights (SDRs). Thus quantified, the aid amounts to SDRs 2,820 million as against SDRs 2,730 million last year.

From the total assistance of $3,450 million pledged to India, about $2,000 million would be extended by the World Bank group. This amounts to 58 per cent of the consortium's total assistance during 1981-82 compared with 49 per cent in 1980-81.

Projectwise details of the World Bank group's assistance to India during 1980-81 are given below:

Agriculture and rural development: (a) $140 million IDA credit for the irrigation of some 1,07,000 hectares of land and for improvements in planning, design and construction, and operation of medium irrigation projects in Madhya Pradesh. During the next five years this would help increase foodgrains production in the State by more than 2,00,000 tonnes. Total project cost: $232.1 million.

(b) $125 million IDA credit to be disbursed through the National Co-operative Development Corporation for relending through state co-operative banks for co-operative warehouses and cold storage and marketing facilities in nine states. This would benefit more than 3.2 million families. Total project cost: $267 million.

(c) $83 million IDA credit for the construction of two barrages in Orissa across the Mahanadi and Birupa rivers to ensure the continued irrigation of 1,67,000 hectares of land. The income of farmers and the employment of agricultural labourers would thus be safeguarded. In addition, a drainage master plan designed to improve water management practices throughout the Mahanadi delta area is included. Total project cost: $110.3 million.

(d) $54 million IDA credit to finance the construction of 120 to 160 tank irrigation schemes on 25,000 hectares of land in Karnataka is expected to benefit about 8,000 farm families.

Table 4: World Bank group assistance to India
(Approved till June 30, 1981)

($ million)

Year	Purpose		Amount
	A. **Transportation**		
	(a) **Railways**		
1949	Railway project	(IBRD)	34.00
1957	Railway project	(IBRD)	24.00
1957	Railway project	(IBRD)	19.11
1957	Railway project	(IBRD)	11.20
1957	Railway project	(IBRD)	35.70
1958	Railway project	(IBRD)	85.00
1959	Railway project	(IBRD)	50.00
1960	Railway project	(IBRD)	70.00
1961	Railway project	(IBRD)	50.00
1963	Railway improvement	(IDA)	67.50
1964	Railway improvement	(IDA)	62.00
1966	IX railway project	(IDA)	68.00
1969	X railway project	(IDA)	55.00
1972	XI railway project	(IDA)	75.00
1973	XII railway project	(IDA)	80.00
1976	XIII railway project	(IDA)	110.00
1979	XIV railway project	(IDA)	190.00
	Sub-total(a)		1,086.51
	of which	IBRD	379.01
		IDA	707.50
	(b) **Roads**		
1961	Highway construction and improvement	(IDA)	60.00
1980	Bihar rural roads projects	(IDA)	35.00
	Sub-total(b)		95.00
	(c) **Ports and shipping**		
1958	Madras Port Trust	(IBRD)	14.00
1958	Calcutta Port Trust	(IBRD)	29.00
1961	Calcutta Port Trust	(IBRD)	21.00
1962	Bombay Port Trust	(IDA)	18.00
1972	Shipping project	(IDA)	83.00
	Sub-total(c)		165.00
	of which	IBRD	64.00
		IDA	101.00
	(d) **Airtransport**		
1957	Air India	(IBRD)	5.60
	Total (A)		1,352.11
	of which	IBRD	448.61
		IDA	903.50
	B. **Telecommunication**		
1962	Telecommunication	(IDA)	42.00
1964	II Telecommunication project	(IDA)	33.00
1969	III Telecommunication project	(IDA)	35.50
1969	Telecommunication project	(IBRD)	27.50
1971	IV Telecommunication project	(IDA)	70.00
1973	V Telecommunication project	(IDA)	80.00
1977	VI Telecommunication project	(IBRD)	80.00
1978	VII Telecommunication project	(IBRD)	120.00
1981	VIII Telecommunication project	(IDA)	314.00
	Total (B)		802.00
	of which	IBRD	227.50
		IDA	574.50

In addition the government would be assisted in creating an improved hydrological data base, and a study of the ways to make more efficient use of irrigation water would be conducted. Total project cost: $77.4 million.

(e) $37 million IDA credit for the purpose of reorganising and strengthening the agricultural extension services in thirty districts of Madhya Pradesh. This would increase crop production and incomes of some 3.8 million farm families. Total project cost: $60 million.

(f) $30 million World Bank loan would finance reforestation and soil-conservation measures and the development of agricultural land in five watershed areas. This would help increase the incomes of about 23,000 farm families and owners of livestock who live in the foothills of the Himalayas. Technical assistance is also included. Total project cost: $60.8 million.

(g) $28 million IDA credit for the introduction of the training-and-visit system of agricultural extension throughout the fifteen agricultural districts of Tamil Nadu. This would increase crop production and benefit 3.8 million farm families. Total project cost: $45.6 million.

(h) $23 million IDA credit aims at providing for better agricultural extension services in Maharashtra through the introduction of training-and-visit system. This would benefit 5.8 million farm families from increased crop production and higher incomes. Total project cost: $38.2 million.

Energy

$400 million World Bank loan aimed at continuing the development of the southern and central areas of the Bombay High offshore oil field by drilling sixty-four wells and constructing fifteen production platforms, a processing platform, and a platform for living quarters. The production potential is expected to reach 12 million tonnes of crude oil a year by mid-1982. Co-financing to the extent of $30 million is expected to be provided by the OPEC Fund for International Development. Total project cost: $858.2 million.

Table 4 (Contd)

($ million)

Year	Purpose		Amount
	C. Power		
1950	DVC project	(IBRD)	18.50
1953	II DVC project	(IBRD)	19.50
1954	Tata power companies	(IBRD)	16.20
1957	Tata power companies	(IBRD)	9.80
1958	III DVC project	(IBRD)	25.00
1959	Koyna project	(IBRD)	25.00
1962	Durgapur power extension	(IDA)	18.50
1962	II Koyna project	(IDA)	17.50
1963	Kothagudem project	(IDA)	20.00
1965	Power transmission	(IBRD)	70.00
1965	Kothagudem phase II	(IBRD)	14.00
1971	II power transmission project	(IDA)	75.00
1973	III power transmission project	(IDA)	85.00
1976	Power development	(IDA)	150.00
1976	Rural electrification	(IDA)	57.00
1977	Singrauli project	(IDA)	150.00
1978	Korba thermal power project	(IDA)	200 00
1978	Tata power companies	(IBRD)	105 00
1979	Rural electrification project	(IDA)	175.00
1979	Ramgundam thermal power project	(IDA)	200.00
1979	Ramgundam thermal power project	(IDA)	50.00
1980	Singrauli power generating station stage II	(IDA)	300.00
1980	Farakka thermal power station stage I	(IDA)	225.00
1980	Farakka thermal power station stage I	(IBRD)	25.00
		Total (C)	2,051.00
	of which	IBRD	378.00
		IDA	1,673.00
	D. Urban development and human resources		
1973	Bombay water supply and swerage projects	(IDA)	55.00
1973	Calcutta urban development project	(IDA)	35.00
1973	Population project	(IDA)	21.20
1973	Education project	(IDA)	12.00
1976	Water supply and swerage project (Uttar Pradesh)	(IDA)	40.00
1977	Bombay urban transport project	(IBRD)	25.00
1977	Madras urban development project	(IDA)	24.00
1978	Second Calcutta urban development project	(IDA)	87.00
1979	Bombay water supply project	(IDA)	196.00
1979	Water supply in Maharashtra	(IDA)	48.00
1979	Water supply and swerage in Punjab	(IDA)	38.00
1980	Transport services in Calcutta	(IDA)	56.00
1980	Water supply in Rajasthan	(IDA)	80.00
1980	Second population project	(IDA)	46.00
1980	Basic health and Nitrition services	(IDA)	32.00
1980	Second Madras urban development project	(IDA)	42.00
		Total (D)	837.20
	of which	IBRD	25.00
		IDA	812.20
	E. Industry and mining		
	(a) **Coal**		
1961	Coal project GOI	(IBRD)	35.00
1961	IISCO—Coal mines	(IBRD)	19.50
		Sub-total(a)	54.50
	of which	IBRD	54.50
	(b) **Oil and natural gas**		
1977	Bombay High and North Bassein offshore development	(IBRD)	150.00
1980	Second Bombay High offshore development	(IBRD)	400 00
		Sub-total(b)	550.00

Table 4 (Contd)

Year	Purpose		($ million) Amount
	(c) Steel		
1952	Steel—IISCO	(IBRD)	31.50
1956	Steel—IISCO	(IBRD)	20.00
1956	Steel—IISCO	(IBRD)	75.00
1957	Steel—IISCO	(IBRD)	32.50
1966	Steel—IISCO	(IBRD)	30.00
	Sub-total(c)		189.00
	of which	IBRD	189.00
	(d) Industrial Credit and Investment Corporation of India		
1955	ICICI	(IBRD)	10.00
1955	ICICI	(IBRD)	10.00
1960	ICICI	(IBRD)	20.00
1962	ICICI	(IBRD)	20.00
1963	ICICI	(IBRD)	30.00
1965	ICICI	(IBRD)	50.00
1967	ICICI	(IBRD)	25.00
1970	ICICI	(IBRD)	40.00
1971	ICICI	(IBRD)	60.00
1972	ICICI	(IBRD)	70.00
1975	ICICI	(IBRD)	100.00
1978	ICICI	(IBRD)	80.00
1980	ICICI	(IBRD)	100.00
	Sub-total(d)		615.00
	of which	IBRD	615.00
	(e) Industrial Development Bank of India		
1973	IDBI	(IDA)	25.00
1976	IDBI	(IBRD)	40.00
1978	IDBI	(IBRD)	25.00
	Sub-total(e)		90.00
	of which	IBRD	65.00
		IDA	25.00
	(f) Industrial imports		
1964	Industrial imports projects	(IDA)	90.00
1965	II Industrial imports project	(IDA)	100.00
1966	III Industrial imports projects	(IDA)	150.00
1966	IV Industrial imports project	(IDA)	65.00
1969	V Industrial imports project	(IDA)	125.00
1970	VI Industrial imports project	(IDA)	75.00
1972	VII Industrial imports project	(IDA)	75.00
1973	VIII Industrial imports project	(IDA)	100.00
1974	IX Industrial imports project	(IDA)	150.00
1975	X Industrial imports project	(IDA)	200.00
1976	XI Industrial imports project	(IDA)	200.00
	Sub-total(f)		1,330.00
	of which	IDA	1,330.00
	(g) Fertiliser		
1971	FACT—Cochin phase II	(IDA)	20.00
1972	FCI—Gorakhpur	(IDA)	10.00
1973	FCI—Nangal	(IDA)	58.00
1974	FCI—Trombay expansion	(IDA)	50.00
1974	FCI—Sindri modernisation	(IDA)	91.00
1975	IFFCO—Phulpur	(IBRD)	109.00
1976	Fertiliser production	(IDA)	105.00
1979	Thal fertiliser project	(IBRD)	250.00
1981	Hazira fertiliser project	(IDA)	400.00
	Sub-total(g)		1,093.00
	of which	IBRD	359.00
		IDA	734.00
	Total (E)		3,921.50
	of which	IBRD	1,832.50
		IDA	2,089.00

Industry

$400 million IDA credit for the construction of a fertiliser plant in Gujarat that would produce 2,700 tonnes of ammonia and 4,400 tonnes of urea a day. This would result in foreign exchange savings from reduced imports of fertiliser to increase to more than $3,440 million during the next twelve years. Co-financing is expected to be provided by the ODA ($104.5 million) and OECF ($98.7 million). Total project cost : $1,276.9 million.

Telecommunications

$314 million IDA credit for providing additional direct-exchange lines, public call offices, telex facilities and related equipment and for upgrading and modernising the production facilities of three major manufacturers of telecommunications equipment. This would expand the country's telecommunications network in four metropolitan areas and extend it to about 40 million people living in small towns and villages who have never had access to public telephones. Total project cost : $1,619.4 million.

Transportation

$35 million IDA credit to finance the construction and rehabilitation of 700 kilometres of rural roads in Bihar and for improved road maintenance that would permit all-weather transport between farms and markets and facilitate rural development. Total project cost : $52.9 million.

Urbanisation

$42 million IDA credit for the second urban development project in Madras which includes the development of about 15,000 residential and 200 industrial plots on two sites, the provision of basic infrastructure and land tenure to 50,000 slum households, home improvement loans and grants to 80,000 slum households, the procurement of 550 buses, construction and maintenance of roads, and an improvement in management of solid wastes. Technical assistance and training are included. Total project cost: $84 million.

Table 4 (Contd)

$ (million)

Year	Purpose		Amount
	F. Agriculture and irrigation		
1949	Agriculture machinery project	(IBRD)	10.00
1961	Punjab flood protection and drainage	(IDA)	10.00
1961	Tubewell irrigation project	(IDA)	6.00
1961	Shetrunji irrigation project	(IDA)	4.50
1961	Salandi irrigation project	(IDA)	8.00
1962	Sone irrigation project	(IDA)	15.00
1962	Purnea irrigation project	(IDA)	13.00
1966	Beas agricultural equipment project	(IDA)	23.00
1969	Tari seeds project	(IBRD)	13.00
1970	Kadana irrigation project	(IDA)	35.00
1970	Gujarat agricultural credit	(IDA)	35.00
1970	Punjab agricultural credit	(IDA)	27.50
1970	Haryana agricultural project	(IDA)	25.00
1971	Andhra Pradesh agricultural credit	(IDA)	24.40
1971	Tamil Nadu agricultural project	(IDA)	35.00
1971	Wheat storage project	(IDA)	5.00
1971	Pochanpad irrigation project	(IDA)	39.00
1972	Agricultural aviation project	(IDA)	6.00
1972	Mysore agricultural credit	(IDA)	40.00
1972	Maharashtra agricultural credit	(IDA)	30.00
1973	Bihar agricultural marketing	(IDA)	14.00
1973	Mysore agricultural marketing	(IDA)	8.00
1973	Madhya Pradesh agricultural credit	(IDA)	33.00
1973	Uttar Pradesh agricultural credit	(IDA)	38.00
1973	Bihar agricultural credit	(IDA)	32.00
1974	Himachal Pradesh apple project	(IDA)	13.00
1974	Karnataka dairy project	(IDA)	30.00
1974	Chambal irrigation project	(IBRD)	52.00
1974	Rajasthan Canal command area	(IDA)	83.00
1974	Rajastan dairy development project	(IDA)	27.70
1974	Madhya Pradesh dairy development project	(IDA)	16.40
1974	Drought-prone area programme	(IDA)	35.00
1974	Godavari river barrage	(IDA)	45.00
1975	Agricultural Refinance Corporation	(IDA)	75.00
1975	West Bengal agricultural development project	(IDA)	34.00
1975	Chambal command area (M.P.)	(IDA)	24.00
1976	Seed production project	(IBRD)	25.00
1976	Cotton development project	(IDA)	18.00
1976	Madhya Pradesh wood processing project	(IDA)	4.00
1976	Andhra Pradesh command area development	(IBRD)	145.00
1977	Gujarat fisheries	(IBRD)	14.00
1977	Gujarat fisheries	(IDA)	4.00
1977	Kerala agricultural development	(IDA)	30.00
1977	Orissa agricultural development	(IDA)	20.00
1977	West Bengal agricultural extension and research	(IDA)	12.00
1977	Madhya Pradesh agricultural extension and research	(IDA)	10.00
1977	II Agricultural Refinance and Development Corporation	(IDA)	200.00
1977	Periyar-Vaigai irrigation (Tamil Nadu)	(IDA)	23.00
1977	Assam agricultural development	(IDA)	8.00
1978	Maharashtra irrigation	(IDA)	70.00
1978	Rajasthan Agricultural Research and Extension	(IDA)	13 00
1978	Orissa irrigation	(IDA)	58 00
1978	Foodgrain storage project	(IDA)	107.00
1978	Bihar Agricultural Extension and Research	(IDA)	8.00
1978	Karnataka irrigation	(IDA)	126.00
1978	Jammu & Kashmir horticulture, fruit processing and marketing	(IDA)	14.00
1978	Gujarat irrigation	(IDA)	85.00
1978	Andhra Pradesh Fisheries	(IDA)	17.50
1978	Second National Seed Project	(IDA)	16.00
1978	National Dairy Project	(IDA)	150.00
1978	Punjab irrigation	(IDA)	129.00
1979	Haryana irrigation	(IDA)	111.00
1979	Foodgrain storage project	(IDA)	30.00
1979	Agricultural Research project	(IDA)	27.00
1979	Agricultural Extension project	(IDA)	25.00
1979	Uttar Pradesh forestry project	(IDA)	23.00
1980	Agricultural Refinance and Development Corporation	(IDA)	250.00
1980	Second Irrigation Project in Maharashtra	(IDA)	210.00
1980	Second Irrigation Project in Gujarat	(IDA)	175.00
1980	Silk industry in Karnataka	(IDA)	54.00

Table 4 (contd) ($ million)

Year	Purpose		Amount
1980	Forestry in Gujarat	(IDA)	37.00
1980	Cashew production in Kerala, Karnataka, Andhra Pradesh and Orissa	(IDA)	22.00
1980	Crop production in West Bengal, Bihar, Orissa, Madhya Pradesh and Uttar Pradesh	(IDA)	28.00
1980	Irrigation project in Uttar Pradesh	(IDA)	18.00
1980	Agricultural Extension Services in Kerala	(IDA)	10.00
1980	Kandi Watershed and Area Development	(IBRD)	30.00
1980	Mahanadi Barrages project	(IDA)	83.00
1981	Madhya Pradesh medium irrigation project	(IDA)	140.00
1981	Karnataka Tank Irrigation Project	(IDA)	54.00
1981	Maharashtra Agricultural Extension Project	(IDA)	23.00
1981	Tamil Nadu Agricultural Extension Project	(IDA)	28.00
1981	Madhya Pradesh Agricultural Extension Project	(IDA)	37 00
1981	Second National Cooperative Development Corporation	(IDA)	125 00
	Total (F)		3,803.00
	of which	IBRD	289.00
		IDA	3,514.00
	Grand total (World Bank Group)		12,766.00
	of which	IBRD	3,200.61
		IDA	9,566.20

World Bank on South Asian economies

Indian economy bounces

THE World Bank, in a report on South Asian economies, says that the Indian economy rebounded in fiscal 1981 with growing strength in the latter part of the year. This followed a poor monsoon and generally disappointing performance in the previous year.

Aided by a good monsoon, agricultural production more than recovered from the depressed level of the preceding year. Though slower to recover, industrial output gained some momentum, so that growth in gross national product (GNP) was expected to be between 7 per cent and 8 per cent. Production of foodgrains in fiscal 1981 approximated the fiscal 1979 record of 132 million tonnes. Some easing of supply constraints occurred in coal production and port clearance. Against these significant gains, several economic indicators lagged: power and rail transport remained in short supply; the annual rate of inflation remained high at 16 per cent; and the balance of payments presented a serious problem as the current-account deficit increased sharply. Imports rose more than 3 per cent, fuelled primarily by sharp increases in the volume and prices of imported petroleum and fertiliser. This situation was exacerbated by a fall in domestic production of crude oil owing to political agitation in Assam. Although export performance improved somewhat, growth was insufficient to counter the deterioration in the terms of trade.

Stepping back from these recent developments and making a long-term appraisal suggests that the Indian economy today is substantially stronger than it was a half decade earlier, and it should therefore be better able to weather the effects of the harsher external environment. The country's agricultural and industrial bases are considerably broader and more diversified than they were in the past; imports of foodgrains have been gradually eliminated, while substantial buffer stocks of grain have been established; rates of gross investment and national savings have climbed to impressive levels, reaching about 22 per cent of GNP; substantial foreign exchange reserves have been built up; and external debt is at very low levels.

A number of difficulties of a structural nature remain, however, that require sustained action if soundly base development is to be possible in th future. The more serious problem include a very low level of per capi income ($190) with an attendant hig incidence of poverty; a severely strai ed economic infrastructure; inadequa domestic production of commoditie such as edible oils, fertiliser, cemen and steel; inadequate growth of exports; and continuing population pressure. However, significant changes i economic policies are taking place i India in response to the changing resource position and in preparation fo another period of balance-of-payment difficulties. The ambitious sixth five year developmant plan (fiscal 1981-85 addresses itself to all these challenges

During fiscal 1981, Bank assistanc to India continued to emphasise agriculture. The Bank has been particularly active in supporting minor irrigation and other on-farm investment through agricultural credit operation and in providing direct support to major and minor irrigation schemes. Marketing, seed development, agricultural extension, and dairying are other agricultural activities supported by the Bank The Bank has also been active in helping to finance the expansion of output in the fertilizer sector and, through its sizable assistance to development finance institutions, in a wide range of geographically scattered medium-scale and small industrial enterprises. IDA assistance in financing industrial raw materials and components for selected sectors of high priority has been instrumental in facilitating better use of capacity in industry. The Bank has also contributed to the alleviation of infrastructural bottlenecks through its support of the power sector, telecommunications, and railways. The further development of India's reserves of oil and natural gas has also received Bank support.

Bangladesh

Following unfavourable weather and poor harvests in 1979 and 1980, agricultural production in Bangladesh, under the stimulus of good weather, enjoyed a strong recovery in 1981, increasing by about 7 per cent, and the country's position in foodgrains improved considerably. As a result, gross domestic product (GDP) also expanded about 7 per cent. Apart from the effects of favourable weather, the growth in agricultural output was also attributable to government policies, reflected in increased investment in irrigation, better use of existing irrigation facilities, improved delivery of inputs, and price-support measures. Progress was also made in raising administered prices to reflect costs and in containing current expenditures while maintaining a high level of government investment.

Along with these favourable developments, however, fiscal 1981 witnessed a serious deterioration in public finances and in the balance of payments, continuing a situation that had been aggravated in fiscal 1980. The budgetary difficulties were associated with large expenditures for food procurement and a reduced inflow of commodity aid. Notwithstanding the conclusion of an Extended Fund Facility agreement with the International Monetary Fund (IMF), the balance of payments deteriorated because of declining jute prices, higher petroleum prices, and a shortfall in commodity aid.

Viewed in long-term perspective, Bangladesh has made considerable progress in recent years in laying foundation for its development. Among noteworthy gains that have been made are the rehabilitation and expansion of the physical infrastructure, better use of capacity, improved performance in public investment—all laying the foundation for future agricultural and industrial growth—and greater development activity on the part of the private sector.

This evidence of sustained recent progress must be seen, however, against the backdrop of the massive development problems that the country faces *viz*, low food production, widespread illiteracy, increasing pressure of population on a small land area, and shortage of energy. Indeed, agricultural development, education, family planning, and energy have been identified in the new second five-year plan as the country's top development priorities.

Activities of the Bank are designed to help the government address these problems. In agriculture, IDA credits are helping the government to implement its ambitious, yet technically feasible, Medium-term Foodgrain Production Plan, the aim of which is food self-sufficiency by 1985. Toward this end, credits have been provided for minor irrigations, agricultural extension, agricultural credit, and the production and transport of fertiliser. With a group of other donors the Bank is continuing its support of the family-planning programme and has been discussing with the government ways of improving the management of the programme. In energy, the Bank is supporting both development of the country's natural gas resources and the formulation of a national energy policy. To help broaden the industrial base and increase non-traditional exports, members of the Bank staff have been aiding the government in developing the basis for a comprehensive set of industrial policies along with direct lending for industrial projects.

Pakistan

In fiscal 1981, for the fourth consecutive year, the economy of Pakistan showed continued growth, although at a somewhat slower pace than in fiscal 1980. Indeed, an annual growth rate of about 5 per cent seemed within reach. Agricultural output increased by between 3 per cent and 4 per cent; in addition, industrial output also revived as capacity and its use grew and as the availability of imported inputs increased. The expansion was facilitated by good weather, continued growth in exports and migrants' remittances, and favourable economic policies that both encouraged the private sector and provided general economic stability. The government has enjoyed considerable success in its efforts at management of demand; the general budgetary situation, public and national savings, and inflationary pressure improved considerably in both 1980 and 1981. Balance-of-payments pressures, which have been severe in recent years, were moderated through the conclusion of an agreement with the IMF for an Extended Fund Facility, the largest granted by the Fund so far, and an eighteen-month rescheduling agreement on external debt with bilateral creditors of the Pakistan Consortium.

In industry, various incentives have begun to stimulate private investment and exports, while a concerted attempt to introduce reforms, including greater flexibility of management and tougher standards of financial performance, has reduced inefficiency in the public manufacturing sector. Agricultural production benefited from investments in quick-yielding projects, improvements in support services, and higher crop prices. Some progress has also been made in developing the country's energy capacity through new exploration, investments in generation and transmission facilities, and encouragement of the use of domestic fuels by the means of appropriate price adjustments.

These recent achievements represent only the beginning of an attack on the country's principal development problems. These include low productivity in agriculture, an inefficient public industrial sector, slow growth in large-scale private industry, heavy dependence on imported energy supplies, a low level of domestic savings, and a high rate of population growth. The Bank has worked closely with the government in attacking several of these problems. In agriculture, studies by the government and the Bank of water management in the Indus basin and other aspects of agricultural productivity have been responsible for significant policy reforms, including efforts to rationalise agricultural input and output prices and a redirection of agricultural investment. Bank-supported projects include seed improvement, the introduction of the training-and-visit extension system, and agricultural research. A programme of joint Bank-Pakistan investigations of the industrial sector is expected to improve efficiency in both private and public in industry.

Nepal

The economy of Nepal in recent years has exhibited little growth, largely reflecting the inability of the agricultural sector to expand output. GDP and agricultural growth since fiscal 1976 have averaged less than population growth, and per capita production of foodgrains has fallen steadily. While investment has expanded, growth in productivity has lagged. Largely as a result of the slow growth in agriculture, the current-account deficit in the balance of payments has increased sharply in recent years.

The obstacles to development in Nepal are severe; they include its difficult topography, inadequate infrastructure, institutional weakness, rapid population growth, and progressive deterioration in the physical environment as a result of steady deforestation and erosion.

The Bank has assisted in developing infrastructure in Nepal through credits for highways, power, and telecommunications. Now the assistance of the Bank is being directed toward the lagging agricultural sector through a number of projects in irrigation, rural development and farming in the hills, grain storage, and credits for forestry and erosion control. The Bank routinely incorporates technical assistance in virtually all its projects in the country in order to strengthen project implementation and institutional capacity.

Resurgence in Sri Lanka

The principal policy reforms of 1977 in Sri Lanka were followed by dramatic improvements in economic performance as import liberalisation, external assistance, and a rationalisation of prices led to an upsurge of private and public investment and large increases in production and employment.

Although growth in GDP decelerated in 1980 to about 5.5 per cent, this was still twice the rate that had prevailed during the period 1970-77. The slowdown was largely attributable to declines in tree crops, manufacturing, construction, and mining. Paddy production, however, grew more than 10 per cent during 1979, reaching a record high level and bringing the country close to self-sufficiency in rice.

A striking feature of Sri Lanka's recent growth has been a massive increase in capital formation. Important projects in the public sector include the Accelerated Mahaweli Programme and housing and urban-renewal programmes. Private investment has also increased sharply, with total gross investment increasing from 14 per cent of GDP in 1977 to 35 per cent in 1980. Foreign savings financed most of this large increase in investment.

Beginning in 1980 and continuing into 1981, claims on resources—especially demands by the public sector for the completion of important projects that require long gestation periods—brought severe pressures on public finances and the balance of payments, leading to rapidly rising prices and a reassessment, supported by the economic and sector work of the Bank, of the government's development programme. This reassessment has led to a decision to reduce general expenditures and readjust spending priorities.

The resurgence in the Sri Lankan economy and the accompanying pressures on resources had, by early 1981, reached the stage at which major stocktaking and policy actions were essential in order to preserve the gains reached in the period since 1977. The central problem was excessive spending on long-gestation or low-yielding projects, coupled with stagnation in exports of tree crops. A reversal of the deterioration in the overall economic situation requires a reform of public finances, including better performance of corporations in the public sector, reevaluation of the public investment programme, improvements in the tr
crop sector, and rectification of the tra
deficit by stimulating exports and co
taining imports.

The Bank is working closely w
the government in attacking these p
blems. The Bank is giving substant
support to the Mahaweli Programn
which consists of ambitious, multip
purpose projects for river-basin dev
lopment. Lending to expand produ
tivity in the tree-crop sector is an i
portant contribution to export develo
ment; joint studies of export-incenti
policies by the World Bank and t
Sri Lankan government have the sar
objectives.

Burma

Agricultural production in Burn
recorded steady progress in the la
1970s as investment priorities shift
towards the primary producing secto
Use of higher-yielding varieties of ric
coupled with favourable weather a
attractive fertiliser price incentives, l
to rapid increases in paddy outpu
Industrial performance, however, w
less consistent. Real GDP, neverthele
increased 6 per cent a year in the la
1970s, in sharp contrast to performan
in earlier years, and is expected
have increased 8 per cent in fiscal 198

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SPECIAL ARTICLE

'Sugar-coated' debentures

By KUMARAN POLA

DEBENTURES have always been bitter pills for the investors to swallow. They remain so even at present although the public relations officers in companies and the underwriters, brokers and managers to the public issues of debentures may want one to believe otherwise. Straight debentures with a simple fixed rate of interest and long term maturity or redemption are difficult to sell during an era of rising prices and interest rates. Therefore, marketing of debentures is possible only after appropriate 'sugar-coatings', *i.e.*, by offering incentives such as option for conversion into equity shares, upward revision of interest rate, additional interest to match with stepped-up dividend, buy-back of debentures, etc.

The debentures which are 'sugar-coated' well have received good response from the investors. On the other hand, in the case of debentures whose 'sugar-coatings' are thin, the investor-response has been lukewarm. The sudden spurt in the number and amount of debenture issues by companies is also the result of the exigencies caused by the reported resources constraints on the public financial institutions and the consequent compulsions on the companies to approach the capital market directly. This article attempts to examine the financial environment within the companies which have issued debentures during the last couple of months and also the external environment which has a bearing on the capital structure planning and financing patterns in these companies.

Loans from banks

During the seventies, the financial institutions emerged as the important supporter of the capital market. Their shares in the share capital and debenture capital issues, which devolved upon them either through direct subscriptions or through underwriting commitments, had been continuously rising. The financial institutions have become instrumental in removing the stigma attached to the raising of capital through debenture issues. Traditionally, the banks and other creditors had been looking askance at the companies issuing debentures. Issuance of debentures was considered generally as a sign of financial weakness.

By contributing as much as ten times in 1979-80 compared to what they did in 1970-71, the support from the financial institutions, by way of disbursements in respect of debentures, proved an important source of long-term funds to the corporate sector (see Table 1). However, the financial institutions have been constrained now to reduce the quantum of their support to the capital market. These institutions face resources constraint and the private sector companies are being told in no uncertain terms that their dependence on the financial institutions for long-term funds should be reduced. The companies are being instructed to approach the capital market directly to raise funds.

At the same time, the financial institutions have been directed by the Government not to underwrite debenture issues of companies coming under the purview of Monopolies and Restrictive Trade Practices Act (MRTP) and Foreign Exchange Regulations Act (FERA) except in cases where commitments for underwriting have already been made. Now they are allowed to underwrite such issues only when they are certain that the issues will be oversubscribed. At the same time, the Reserve Bank of India has begun making serious attempts at creating a secondary market for debentures to help the banks on whom debentures have devolved due to underwriting commitments. The RBI committee set up to recommend measures to develop a secondary market for debentures is now seized of this issue. This also has the effect of reducing the institutional support to long-term financing of companies.

These developments have been in the making for quite some time. The present institutional attempts to force companies to approach the capital market directly, combined with the earlier practice of in-

Table I : Support to capital market by financial institutions*

(Rs lakhs)

Year (April-March)	Sanctions		Disbursements		Capital raised in the market	
	Equity & Preference	Debentures	Equity & Preference	Debentures	Equity & Preference	Debentures
1970-71	1460	2520	1320 (380)	800 (670)	3878	677
1971-72	3490	1770	1110 (350)	310 (250)	5223	1840
1972-73	2450	1680	1780 (570)	1270 (980)	4389	4654
1973-74	3103	931	1918 (592)	1267 (1113)	6787	1727
1974-75	3473	2559	1777 (632)	1350 (1160)	5497	2247
1975-76	3594	3820	2565 (723)	424 (265)	7391	3036
1976-77	5006	1855	2421 (450)	1915 (1303)	7023	4078
1977-78	7392	3038	3512 (699)	2538 (1891)	9533	2910
1978-79	6408	5431	3990 (760)	2554 (2118)	9100	5001
1979-80	9180	9775	2854 (873)	8163 (7148)	10012	3326

* Covering IDBI, IFCI, ICICI, IRCI, LIC, UTI, SFCs and SIDCs

Note: Figures within brackets indicate share of LIC and UTI
(**Report on Development Banking in India 1979-80**, Industrial Development Bank of India)

Dr Kumaran heads the corporate division in the Commerce Research Bureau.

corporating convertibility clause in long-term loan agreements with the financial institutions, explain more or less fully the recent spurt in the number and amount of debenture issues.

Financial environment

An analysis of the financial environment in companies which have issued debentures in the recent past indicates overwhelming consideration in favour of the issuance of debentures as a source of long-term funds. The companies included in the analysis are Associated Bearings Company Ltd, East India Hotels Ltd. Hindustan Development Corporation Ltd, Indian Rayon Corporation Ltd, J. K. Synthetics Ltd, Madura Coats Ltd, Reliance Textile Industries Ltd, Siemens India Ltd, Straw Products Ltd, Voltas Ltd and Wimco Ltd. The data used are based on the published annual reports of these companies. The financial year of all the companies ended in March or thereafter in 1980.

By issuing debentures to the public, companies can obtain long-term funds without yielding control. There is no dilution in ownership inasmuch as th proportionate shares of the existing shareholders in regard to the sharing of income and voting rights remain the same Long-term loans from financial institutions which are subject to convertibilit clause and additional equity capital issue will lead to dilution in control and return. Debentures assure a definite sourc of funds for pre-determined periods. Thi enables companies to evolve appropriat financial plans and stick to them. Th interest payable on debentures is fixe contractually and is lower than that expected on equity shares. It is also deductible expenditure from the point o view of corporate taxation. Because o this tax benefit, companies are able to trade on thin equity and magnify the earnings available to the shareholders by including more and more of borrowed funds in their capital structure (see Table 2).

Table 2 : Magnifyins effect of trading on thin equity

Name of companies	Totat borrowings networth (ratio) 1978-79	Totat borrowings networth (ratio) 1979-80	Long-term debt/ networth (ratio) 1978-79	Long-term debt/ networth (ratio) 1979-80	Return on total assets (precentage) 1978-79	Return on total assets (precentage) 1979-80	Return on net worth (percentage) 1978-79	Return on net worth (percentage) 1979-80
	1	2	3	4	5	6	7	8
Associated Bearings	0.26:1	0.35:1	0.07:1	0:04:1	9.74	12.21	16.73	21.44
East India Hotels	1.79:1	1.04:1	0.56:1	0.26:1	7.88	8.30	18.40	18.11
H D C	1.10:1	1.09:1	0.08:1	0.19:1	8.14	8.71	23.46	24.71
Indian Rayon	0.53:1	0.65:1	0.29:1	0.32:1	11.47	9.64	24.91	23.25
J K Synthetics	0.72:1	0.83:1	0.17:1	0.27:1	7.50	6.63	18.82	17.19
Madura Coats	1.35:1	1.33:1	0.26:1	0.30:1	3.26	7.34	9.97	22.74
Reliance Textiles	2.61:1	2.96:1	0.86:1	0.98:1	7.47	7.33	34.80	35.33
Siemens	0.47:1	0.67:1	0.13:1	0.12:1	4.72	4.76	14.98	17.88
Straw Products	0.99:1	1.05:1	0.51:1	0.58:1	5.46	6.37	12.71	15.47
Voltas	2.63:1	2.39:1	0.44:1	0.44:1	2.08	3.10	15.55	23.18
Wimco	0.81:1	1.06:1	0.23:1	0.31:1	4.96	5.65	11.73	14.94

All the companies included in the analysis show unutilised debt absorption capacities. The guidelines for the issue of debentures by public limited companies have fixed a ceiling of 2:1 for the debt-equity ratio. Even Reliance Textiles, Straw Products and East India Hotels, the companies with highest debt-equity ratios, have them far below the norm of 2:1 (see Table 2).

Table 3 : Short-term and long-term borrowings vis-a-vis paid-up capital and resources

(Rs lakhs)

Name of companies	BORROWINGS Bank loans	Loans from financial Institutions	Debentures	Fixed deposits	Total borrowings (including others)	NET WORTH Paid-up capital	Reserves	Total net worth
Associated Bearings	125	75	—	401	601	882	812	1,694
East India Hotels	1,518	—	18	372	2,196	1,317	1,130	2,448
H D C	444	28	75	67	639	150	436	586
Indian Rayon	621	49	74	43	1,120	562	1,162	1,724
J. K. Synthetics	2,067	979	210	1,917	5,173	1,675	3,878	5,553
Madura Coats	—	384	200	446	2,868	1,178	978	2,156
Reliance Textiles	5,397	1,159	1,891	863	9,406	1,236	1,943	3,179
Siemens	616	—	200	586	1,402	720	1,384	2,104
Straw Products	520	573	466	472	2,151	523	1,533	2,056
Voltas	2,577	281	430	548	3,836	623	983	1,606
Wimco	683	177	69	498	1,655	845	715	1,560

Low operating and financial leverages

Since these companies are operating with considerably lower operating and financial leverages, they do not run any risk of bankruptcy if debentures are issued to augment funds. Since these companies, whose reliance on banks and financial institutions is already moderate to heavy (see Table 3), are obliged to reduce this dependence, the two sources of funds available *viz*, issuance of debentures and the inviting of fixed deposits from public, will have to be tapped increasingly to augment their resources for permanent working capital and for expansion and diversification. The alternative is to miss the business opportunities which would mean a lot in terms of long-term profitability and survival for these companies. The low operating and financial leverages (see Table 4) indicate that already most of these companies are losing profitable investment opportunities because of the orthodoxy, conservatism and lack of ingenuity and boldness in corporate planning.

The operating leverage indicates the percentage change in operating profit (profit before interest and taxes) resulting from a certain percentage change in sales revenue. A low operating leverage gives the managements of companies enough cushion against the risks of fluctuations in sales revenues. However, the operating leverage ratios in the companies under analysis are too low to be described as prudent ratios. Except for Hindustan Development Corporation and Wimco, the operating leverage is below 2. The implication is that for a 10 per cent change in sales revenue, their operating profits will fluctuate only at a percentage lower than 20.

A low operating leverage provides a significant challenge and opportunity to company managements inasmuch as they have the freedom to raise the financial leverage which measures the effect on profit before tax due to increased use of fixed interest funds in the capital structure. There is no justification for keeping both these leverages low as it is tantamount to frustrating their own declared objective of maximising the rate of return on the shareholders' funds. Indirectly, this will get reflected in the low market quotations for the shares of the companies. Thus the share prices component of the shareholders' wealth in companies will also continue to be low.

It is noteworthy that the managements of Reliance Textiles, Voltas and Wimco are able to utilise their low operating leverages to the advantage of the shareholders. They have been using increasing levels of borrowed funds thereby raising their financial leverages. The net result is a favourable combined leverage. The combined effect of the two leverages is reflected in a certain percentage change in profits before tax for a certain percentage change in sales. These companies could experience a 31 to 40 per cent change in profit before tax for a 10 per cent change in sales revenue (see Table 4).

Source of funds

From the analysis given above, it is apparent that the external environment forces and the internal environment favour the companies to tap more and more of funds directly from the capital market either through debenture issues or as fixed deposits. Debentures have advantages over fixed deposit in certain respects. The rate of interest required will be higher than that on debentures. The ceilings on rate of interest at present are 15 per cent on fixed deposits and 13.5 per cent (plus additional one per cent in the event of the enhancement of dividend) on debentures. Further, only 85 per cent of the interest expense on account of fixed deposits are deductible for tax purposes in contrast to 100 per cent of the interest expense on account of debentures. During the period of rising prices and interest rates, there is no substitute to borrowings through debentures at fixed rate of interest with a 7 to 12 year maturity. The main hazard, however, is the uncertainty about the likely public response.

Table 4 : Operating and financial leverages

Name of Company	Operating Leverage		Financial Leverage		Combined Leverage	
	1978-79	1979-80	1978-79	1979-80	1978-79	1979-80
Associated Bearings	1.01	0.73	1.08	1.06	1.09	0.77
East India Hotels	1.19	1.28	1.68	1.50	2.00	1.92
H D C	0.86	2.00	1.50	1.34	1.29	2.68
Indian Rayon	1.21	1.25	1.15	1.21	1.39	1.51
J. K. Synthetics	1.32	1.76	1.18	1.46	1.56	2.57
Madura Coats	2.17	1.11	1.81	1.39	3.93	1.54
Reliance Textiles	1.25	1.57	1.87	2.17	2.34	3.41
Siemens	1.24	1.35	1.16	1.22	1.44	1.65
Straw Products	1.75	1.79	1.72	1.47	3.01	2.63
Voltas	1.25	1.24	3.18	2.52	3.98	3.12
Wimco	2.15	2.06	1.49	1.93	3.20	3.98

$$\text{Operating Leverage} = \frac{\text{Contribution (i.e. Sales—variable expenses)}}{\text{Profit before interest and tax}}$$

$$\text{Financial Leverage} = \frac{\text{Profit before interest and tax}}{\text{Profit before tax}}$$

$$\text{Combined Leverage} = \text{Operating leverage} \times \text{Financial leverage}$$

The straight debentures with a simple rate of interest and long-term maturity will not be welcomed by the investors. The successive hikes in the rates of interest on debentures, in fact twice during the last one year, *i.e.*, October 1980 and February 1981, have resulted in substantial depreciation in the prices of the debentures. The depreciation has ranged from 20 to 25 per cent in respect of several rights debentures issued with a rate of interest of 11 per cent following the guidelines formulated for the purpose by the Government in 1978. When the same companies are offering up to 15 per cent on fixed deposits with a maturity of only three years, the investors will not find it worthwhile anymore to invest in the straight debentures.

'Sugar-coating' of debentures

It is to arouse sufficient public interest and to ensure good response to the debenture issues that various incentives are being offered to their subscribers. These include additional one per cent interest when dividends exceed the predetermined rates, adjustments in interest rates on the issue of bonus shares, conversion of a portion of the debentures into equity, adjustments in the conversion ratios for bonus issues of shares before conversion, repurchases of debentures from the market, buy-back of debentures from the holders and upward revision of interest rates as per the government policy. As a result of the attractive package of additional incentives attached to the debentures, they have ceased to be the traditional fixed-income-yielding type of corporate securities.

'Sugar-coatings' have removed most of the unwelcome features of the straight debentures. For instance, the risk of depreciation in debenture prices may be minimised by their repurchase from the market or buy-back from the holders at the par value by the issuing companies. The undertaking to revise the interest rate upwards in tune with the government policy in this regard will also prevent such depreciation. Repurchase and buy-back clauses, in addition, confer liquidity on these securities. Similarly, the disincentive of holding on to the debentures with long-term redemption or maturity will be more than offset by the potential gain to the debenture-holders who receive equity shares at conversion prices which are considerably lower than the prevailing market prices.

Unbridled price rise

By ARVIND BHANDARI

THE opposition criticism in Parliament that continually rising prices are breaking the back of the common people does not seem to have stirred the conscience of the Government, such as it is. The Finance Minister has continued to make selective use of statistical data to present a garbled picture and draw comforting conclusions. Even the large crowd of women who demonstrated in Delhi some days ago did not move him. If only ministers themselves were to visit grocery shops to purchase the necessaries of life, instead of relying solely on official reports, the complacency in high quarters would lessen. On paper the wholesale prices have risen only by 6 per cent in the February to July period this year, but the consumer price index has jumped by 36 points (over 12 per cent) in the same period. Since then the consumer index has risen further because wholesale prices registered a 10-point increase in less than eight weeks. The trend of rising prices is confirmed by the substantial increase in the all-India consumer price index for industrial workers—from 382 points in May, 1980 to 439 points in June, 1981—marking a rise of 57 points against the average of 35 to 40 points in earlier years. This makes nonsense of the claim that the prices have generally been in check since the Congress (I) assumed power. Far from being under control, or confirming the much-talked-of "moderation", prices have shown a spurt which is the biggest in the past seven years. This indicates the failure of the Government's strategy of stabilising prices through imports of certain essential commodities even at a high cost to the exchequer. True, there is generally a time lag of about four months for a fall in wholesale prices to make an impact on retail markets. But owing to the administration's inability to ensure a steady flow in commercial channels, and the trader's unchecked tactics to release supplies in a trickle to prevent any fall in prices, the common man continues to pay dearly for his needs. Apart from other consumer goods, most vegetables are dearer this year. And yet the Government recently permitted large exports of vegetables to West Asia. Secondly, the Essential Commodities Act and the anti-hoarding measures have not been enforced with the necessary vigour and consistency. Since the wholesale index does not reflect the real price situation, official spokesmen would do well to rely on retail prices to assess the inflationary situation.

Hydel potential

Of Himachal Pradesh's immense hydel power potential, estimated at 12,345 mw, only 3,307 mw capacity has so far been exploited, even though the northern region's energy requirements have increased manifold during the past few years. Every additional step designed to utilise the State's river basins for power generation is, therefore, to be welcomed. The Rs 533-crore Nathpa-Jhakri project, which is primarily a joint Himachal-Haryana venture, has a chequered history. It was only last April that the respective shares of the various states of the region, including Haryana, Rajasthan, and the Delhi Union Territory, were fixed. The Himachal-Rajasthan accord on the Rs 345-crore Kol project, expected to generate 600 mw of power, is the latest in the series and, like the others, it is the result of prolonged negotiations in which Punjab was also directly involved. In May this year the Chief Ministers of Himachal Pradesh and Punjab agreed that the Kol Dam project in Mandi district would be executed jointly by the two states, subject to its clearance by the Central Government. According to an agreement signed recently, Rajasthan's share in the generated power will not be less than 50 per cent. Rajasthan has a 220 mw nuclear plant, but the State's growing need for energy is not being met. The promise of 10 per cent of Nathpa-Jhakri power and of at least 50 per cent of Kol project power would help cover most of the state's power gap. A far more ambitious and highly economical project, which has been under discussion for many years and promises to yield cheap power for the entire region, is the Parvati hydel scheme in Kulu district. This project, one of the biggest in the country, is estimated to generate 1900 mw of power at a cost of Rs 1,000 crores. Unfortunately, the progress made in pur ance of the decision to prepare a mas plan for the entire Parvati Valley is slo Meanwhile the water of this and seve other Himachai rivers is largely go waste even as the cost estimates power projects rapidly mount owing inflation. On current performan neither of these schemes will be co pleted before 1988. Massive funds a required for implementing these schem and it is to be hoped that the Cent with the assistance of internation agencies wherever possible, will not any of these projects suffer for lack finance or through administrative dela The history of the long delayed The Dam provides a timely lesson in th regard. Garrulous conferences abo energy conservation and development new sources of energy can only a quire meaning if simultaneously bu ness-like efforts are made to tap t country's known potential for chea hydel power

DATELINE NEW DELHI

Economy!

It is good to know the that Punja Government has decided to launch a economy drive. But, like its peer, th Central Government, it will have show actual results in order to live dow a reputation for empty locquaciousnes Past experience has shown a wide ga between intention and achievemen Exactly two years ago the predecesso state ministry promised virtually th same measures, which included limitin STD telephone facilities and restrictin official trips to Delhi of minister secretaries and heads of departmen Insofar as the present Governmen has been constrained to repeat the sam set of orders, one would be led to th conclusion that the previous directive were not implemented. A year ago th present Government imposed ban on th creation of new posts. Considering th fact that the bureaucracy replenishes i self at national average rate of 6 per cen per annum, this order too had much t commend it. The fact that the State' non-plan expenditure overshot the budge by Rs 40 crores last year suggests tha this measure too met with failure. Accor ding to an official statement, the new eco nomy drive has not been extended t universities, public sector corporation and various boards because the Government is not competent to exercise control over these bodies. This is true, bu the Government would be well withi its rights to question fresh demands fo funds made year after year. The annua losses of the Punjab State Electricit Board, for instance, average Rs 60 crores. At the same time the number of people employed by this undertaking rose by a stupendous 69 per cent between 1973-74 and 1977-78.

Special Reports

Another cotton textile industry crisis

BOMBAY

THE cotton textile industry seems to have run into another crisis. According to Mr K. Rajagopal, chairman of the Indian Cotton Mills Federation, most of the mills are exposed to cash losses. The prices of cotton and viscose fibre were chasing each other and, according to the ICMF's chairman, there was a strong case to reverse the trend through downward adjustment in the prices of cotton and viscose fibre. Between October 1980 and August 1981 the prices of some of the prominent varieties of cotton like Wagad, Kalyan, J 34 and 1007 moved up by as much as 30 to 90 per cent. "The economic working of a large majority of the mills has thus been shattered and the clock put back on modernisation, textile exports, yarn supply to the decentralised sectors at stable prices"

Mr Rajagopal was unhappy with the working of the Cotton Corporation of India as also the Maharashtra State Cooperative Marketing Federation, which is the agency for monopoly procurement of cotton in Maharashtra. Both of them, he said, had failed to take an economic and balanced view of the need to market in an orderly manner the cotton stocks procured by them. On the other hand, because of their monopoly hold on stocks, the free flow of cotton in the market was artificially restrained leading to a bullish trend in prices. Instead of going to the rescue of the cotton consumers by unloading the stocks and thus stabilising prices at reasonable levels, these agencies succumbed to the temptation of exploiting the situation, thereby contributing to the price spiral. He demanded that the scheme for monopoly procurement of cotton by the state agencies be dropped. Simultaneously the board of the CCI should be broad-based and its functions revamped to meet the overall national objectives.

In the context of a depleted carry-over for 1980-81 season Mr Rajagopal wanted import of cotton to continue. He explained that the average monthly rate of consumption of mills would touch around 6.80 lakh bales if they were free from energy constraints and the cotton supply position was stable. The carry-over requirements would, therefore, be at least 20 lakh bales. As against this, the carry-over stocks were estimated at only 13.50 lakh bales and there was a clear gap of 6.50 lakh bales in supply. He was happy at the government importing medium staple cottons from Pakistan, but suggested that instead of the offer of the imported cotton being restricted to exporting units and the mills in the co-operative and NTC sectors, it was necessary to make available import quotas to all the mills freely. In view

THE INDIAN COTTON MILLS FEDERATION
BOMBAY
TWENTY-THIRD ANNUAL GENERAL MEETING

Mr K. Rajagopal, chairman of ICMF, addressing the annual general meeting. Others, from left, are Mr Rasesh N. Mafatlal, Mr Tejkumar Sethi, Mr Madanmohan Mangaldas, Mr G. K. Devarajulu, Mr Kantikumar R. Podar (vice-chairman), Mr Arvind Narottam Lalbhai (deputy chairman), and Mr C. V. Radhakrishnan (secretary-general).

of the restrictions on the operations of the scheme at present the response, he pointed out, had been inadequate.

One another significant point made by him was that the use of finer cottons must be promoted by the government initiating fiscal measures to encourage consumption of long and extra long staple cottons. Under the present excise structure the duty on fabrics having the same price range rose sharply from two to four per cent to 15 per cent as soon as the average count of cloth crossed 40s and this acted as a damper on the consumption of long and extra long staple cottons. He pointed out that from the national point of view the break through achieved in the production of long staple cottons had to be encouraged as it gave a better return to the farmers. These cottons were capable of giving more metres of cloth per kg than the coarse and medium varieties. Therefore, to improve the per capita availability of cloth, without extending the cotton acreage, this shift in cultivation would be a major tool in the hands of the policy-makers. He drew particular attention to a recommendation of the Indirect Taxation Enquiry Committee that "the tax on cotton fabrics should be based on the price before tax, with the least rate of tax to be applied to the cheaper varieties of cloth."

Mr Rajagopal, in his address to the annual meeting of the Indian Cotton Mills Federation, also dealt with the problems of exports, IDBI soft loans, credit needs of mills and the increasing role being assigned to the handlooms in meeting the country's cloth requirements. He said that no precise idea was available about the number of operative handlooms, their exact location, state of equipment, conditions of workers, production pattern, marketing disabilities and other deficiencies. He reiterated the need for an all-india census of handlooms to assess the production and development needs of this employment-oriented sector. Similarly the proposed Powerloom Board should monitor the growth and production potential of that sector with a view to canalising the required help and to fulfil the role assigned to it.

The industry, he said, had repeatedly pleaded to the Government for the creation of a modernisation reserve to insulate it from the cyclical changes in profitability. It was unfortunate that the Government had not yet accepted this suggestion. That apart, the virtual withdrawal of the soft loan scheme by th IDBI and the hike in interest charge for term loans had also given a setbac to the mills' modernisation programme Further the IDBI had not agreed to finance overrun in project costs and th mills were finding it beyond them t meet the gap between the sanctione loan for machinery purchases and th escalation in costs. The least that shoul be done, Mr Rajagopal suggested, t gear up the pace of modernisation wa to restore the original terms of the sof loan scheme, with concessional rates o interest as an important component an financing of overrun in project costs i a realistic manner.

In the context of a widening trad gap, he emphasised that the textile should be one of the leading items of th country's export to augment the foreig exchange resources. The buoyancy i export earnings by the textile sector ha been kept up in the financial year 1980-81 in spite of the severe handicaps. A compared to the export earnings o Rs 786 crores in 1979-80 the export o all items of textiles in 1980-81 yielde Rs 874 crores according to Mr Rajagopa who, presumably did not restrict himsel to exports of cloth and yarn by the mil

Textile imports: Liberalisation mooted

From MALCOLM SUBHAN

BRUSSELS

AN article on textiles appeared in Sweden recently under the headline "A new, realistic import policy is needed now." It was *not* a demand for the Multifibres Arrangement to be tightened up or made permanent; it did not even ask for the continuation of the "Nordic" clause in the MFA. (This is the clause under which countries like Sweden, with small internal markets and a high level of imports, can take steps to preserve a "minimum viable" level of domestic production).

The article in fact called for a liberalisation of imports from developing countries. It pointed out that the barriers to such imports had worked to the detriment of both Swedish consumers and the developing countries—and had totally failed to protect domestic manufacturers. Imports had continued to rise—but they originated principally in other West European countries and the US.

The article was written by the managing director of the Swedish Textile Wholesalers' Association, Tore G. Sergenius. It underlined the sharp differences in the views of the trade, on the one hand, and manufacturers, trade unions and the government on the other. Whereas the latter are clamouring for greater restrictions on imports from developing countries, the import and wholesale trade throughout Europe is for unfettered access to any supplier of higher quality and lower-priced merchandise than is locally manufactured.

The association is quite clear as to why the Swedish textile and clothing industry has shrunk to the point where it today accounts for only 1 per cent of the total labour force (as against 10 per cent in the EEC). Wages in Sweden are twice as high as in the UK and 60 per cent higher, than in the US. It is therefore "unrealistic" of the industry and trade unions to continue to demand further protection from imports.

In any case, Sweden's main overseas suppliers are the other industrialised countries, who account for 83 per cent of all imports. The developing countries—mainly Hongkong, India and Korea—together account for around 17 per cent. But the import barriers are aimed primarily at the latter, with the result that Swedish consumers must pay much more for their textiles and clothing.

The basic position of the Swedish wholesale and retail trade is unchanged since 1972: the MFA must be "strictly temporary," to be replaced by free trade in textiles and clothing. Protection of domestic producers should be "reasonable," confined to yarn and fabrics and take the form of economic support measures rather than import duties and quotas.

The trade believes that the entire Swedish export industry would benefit were the Government to support developing countries in their demands for the progressive liberalisation of international trade in textiles and clothing. The ill-will generated by the country's import restrictions are a handicap which all Swedish exporters must currently overcome.

The Swedish market is not a large one, relatively speaking. After all, the country has a total population of just over 8 million, although its per capita income is one of the highest at over $ 12,000. Total imports of textiles and clothing amounted to some 87,000 tonnes last year.

But a move by the Swedish—and other Scandinavian—governments to renounce the Nordic clause would strengthen the hands of the developing countries in the MFA negotiations. It would also make it easier for Denmark to join forces with Germany and the Netherlands in resisting the protectionist demands of the UK., France and Italy.

and the decentralised sectors but also included the garment exports in his calculations.

This was obvious. when he went on to comment that it was rather sad that in the year of MFA negotiations India's fulfilment of quotas of fabrics to the EEC and the USA had woefully lagged behind. His explanation was that the industry had to contend with strident increases in prices of raw materials and other input costs while, on the other hand, the protectionist postures of the importing countries had, if anything, become more rigid. Of the MFA negotiations that have already begun, Mr Rajagopal had to say this: "From the battle lines that are being drawn at Brussels and Geneva it looks more like a multi-fibre 'arraignment' than a multi-fibre arrangement that is sought to be negotiated. I can well imagine the struggle of the Third World countries to carry conviction in their cry for greater access to the markets of the advanced countries,"

Mr Rajagopal proposed that the Government should do away with what he called outlived concept of placing a ceiling on cotton yarn exports and to allow free outflow. At the same time he drew attention of the industry to the fact that over 50 per cent of the world trade in textiles was in the field of blended and synthetic items and India's share therein was insignificant. Proper support and encouragement to the hosiery sector could also lead to a considerable improvement in its performance.

External borrowing for private sector?

From P. C. MAHANTI

CALCUTTA

AS the Sixth Plan resources budget provides for a substantial external commercial borrowing (to the extent of Rs 12,000 crores or so), the private sector has been hoping that it too will be allowed to tap foreign sources to meet part of its financial requirements. All the leading chambers of commerce in the country have been urging the Government to permit them to borrow abroad, especially against projects which have a short gestation period, or those meant exclusively for export production, or those with a high import substitution value and where profitability is high.

There are basically two strong reasons why India should go in for increased international borrowing. First, the aid climate has become more and more unfavourable due to the world economic recession which has reduced the lending capacity of the richer countries. Secondly, international capital markets are flush with liquidity which makes it easier for developing countries to borrow according to needs. In fact, countries like Brazil, South Korea, Malaysia and Indonesia have already borrowed considerably from these markets.

Dr Manmohan Singh, Member Secretary of the Planning Commission has, at a meeting organised by the Bengal Chamber of Commerce and Industry, strongly stressed the need for external commercial borrowing on a substantial scale. "It is absolutely necessary that at least part of the pressure on financial institutions should be taken away by industry looking for funds outside India. These would be syndicated loans from the Eurocurrency market," he has said. India has already successfully floated large loans for the National Aluminium Company, for the Oil and Natural Gas Commission and for Air India to a smaller extent. The same scope should exist for the private sector which too has big and viable development schemes in hand.

The Bengal Chamber itself has produced an excellent study entitled "India and the Eurodollar market," showing how the market has phenomenally grown, particularly since 1974 following the first major price hike by the Organisation of Petroleum Exporting Countries. Of the surplus generated by the oil price hikes which Mr Paul A. Volcker, chairman of the US Federal Reserve Board, has estimated at $ 240 billion ($ 1,000 million = $ 1 billion) cumulating between 1974 and 1979 and of which as much $ 95 billion has gone into the international banks comprising the Eurocurrency system. With this $ 95 billion, the size of the Eurocurrency market has grown from a mere $ 160,000 million in 1975 to $ 485,000 million in 1979. At the end of the past year, the size went up to over $ 600,000 million.

So there is no dearth of funds from this source for all deserving borrowers.

Retail prices of essential commodities in Bombay

Compiled by Commerce Research Bureau

Item	Quality	Rs per kg				Percentage variation on Sept. 18, 1981 over		
		Sept. 18, 1981	Sept. 11, 1981	Aug. 21, 1981	Sept. 19, 1980	A week ago	A month ago	A year ago
Rice	Average	3.60	3.60	3.60	2.80	—	—	28.6
Wheat	Average	3.50	3.50	3.50	2.60	—	—	34.6
Jowar	Average	2.30	2.30	2.30	2.00	—	—	15.0
Bajra	Average	2.30	2.30	2.30	2.00	—	—	15.0
Gram dal	Average	6.50	6.50	6.50	6.00	—	—	8.3
Tur dal	Average	6.80	6.80	6.80	5.60	—	—	21.4
Potatoes	Average	2.20	2.00	2 40	3.00	10.0	—8.3	—26.7
Onions	Average	1.60	1.60	1.80	1.00	—	—11.1	60.0
Milk per litre	Buffalo	5.60	6.00	6.00	4.30	—6.7	—6.7	30.2
Tea	Average	23.00	23.00	23.00	24.00	—	—	—4.2
Coffee	Average	17.50	17.50	17.50	16.50	—	—	6.1
Kerosene per litre	—	1.66	1.66	66	1.39	—	—	19.4
Bread (400 grams)	—	1.55	1.55	1.55	1.30	—	—	19.2
Sugar	Average	5.80	6.00	6.40	11.50	—3.3	—9.4	—49.6
Gur	Average	6.60	6.60	6.60	6 90	—	—	—4.3
Groundnut oil	Average	16.50	16.00	17 50	11.50	3.1	—5.7	43.5
Vanaspati	Average	15.50	15.00	16.50	—	3.3	6.1	—
Toilet soap	—	1.95	1.95	1.95	1.90	—	—	2.6
Exercise book (200 pages)	—	2.50	2.50	2.50	—	—	—	—

Money

Bulky and defective general ledger

THE accounting system of a bank has three objectives. Its main purpose is to record the day's transactions accurately and correctly at the branches. It is a commentary on the state of accounting in banks that even this simple primary function is not performed by the system today. The object of the system is to solve the accounting problems, but the antics of the system are such that it gets lost in the own problems of the system itself. The accounting problems thus remain pending or outstanding.

There is one major reason for delays and difficulties in achieving reliable, accurate and prompt accounts. The system is so complex and so vast, the number of transactions are so many and so complicated that no one person at the branch level has a total comprehensive picture of what is happening actually. The system therefore needs to be simplified, so as to make it comprehensible and understandable even to the juniormost accounts clerk at the branch.

This can be done if we have detailed checklists and guidelines at one place and if frequent changes on small matters of accounting or information significance are not made everyday but made only once a year. As the business of the bank becomes more and more complex several complicated adjustments have to be made. It is these that deter the staff at the branches and delay the process of accounting. The basic principle that should be followed in this respect is that the branches should be required to record the actual transactions only, as and when they take place as simple debits and credits and complex adjustments if any should be centralised in next higher administrative or control offices, where more talents and better supervision is possible.

The second objective of the accounting system is to facilitate reporting as a byproduct of accounting, without waste and duplication, to generate management information for making policies and taking decisions and to set up a communication and flow of such information that serves as strategic controls on performance.

Finally, the accounting system is totally incapable of analysing the income and cost structures or assessing profitability and productivity of the branches. The accounting system of banks is so much lost in the process of tallying and balancing the daily transactions and converting them into the form of accounts, that it has no scope or form to fulfil any of these secondary objectives of reporting or analysis.

The answer to these problems lies in reorganising the general ledger and its balancing and classification books. The general ledger has become too bulky, very unrealistic, totally unrelated to the realities. It contain 25 subheadings of deposit classifications, none of which serve any reporting or analytical purpose except once a year. All of them need to be transferred to a subsidiary general ledger. Further a large number of transit, provision or adjustment accounts, which again serve no reporting or analytical purpose also find a place also should be transferred to a subsidiary. On the other hand, advances to agriculture, small scale industries which are vitally important today, do not find a place in the general ledger at all. Every week and month when they are to be reported, information has to be compiled specially and classified from individual ledgers.

If this is done, the twin problems of inadequacies of the accounting reporting and analytical systems could be tackled simply. The general ledger is required for an overall total picture and for ensuring reliability of accounts. Its distribution in the subsidiary books is required for classification, analysis and statements and returns. In this way it is possible to make the accounting system simpler, more effective, sensitive and useful.

S. G. Shah

The rub lies only in the cost. T
chamber study deals with the cost fro
this two relevant points of view—t
comparative cost as well as the opport
nity cost. It points out that Eurodoll
borrowing is very costly and is availab
for much shorter periods than these fro
the ICF, the IDA or the World Ban
The interest rate to be paid on Eur
dollar borrowings is as high as 16 p
cent to 18 per cent on an average, a
though violent fluctuations in the Lib
(London Interbank Offered Rate) ra
makes any precise estimate difficult. Th
traditional sources such as the Worl
Bank and the IMF borrowings co
around six per cent per annun
Thus from the point of view c
comparative costs, Eurodollar borrow
ings have clear disadvantages. The high
er interest rate apart, the repaymen
period is only ten years. But if one goe
by the opportunity cost criteria, then th
case for substantial borrowing in Eurc
dollar market becomes strong. The tra
ditional sources *i.e.* the World Bank, th
IMF and the IDA cannot possibly ac
commodate all the financial needs o
developing countries. So the choice i
most cases, especially those involving bi
sums of money, is not between the Worl
Bank or the IMF or associate bodie
like the International Developmen
Agency or the International Finance Cor
poration, but between commercial borrow
ing and giving up the project on financia
grounds altogether. So the opportunity
cost is real, and where countries or com
panies can have recourse to borrowing

Bombay spot exchange rates of leading currencies as on 21-9-81

(Currency units per Rs 100)

Country	Currency	Selling T.T.D.D.	Buying T.T. clean
Australia	A. $	9.30	9.50
Austria	A. Schilling	171.00	177.00
Belgium	B. Franc	401	411
Canada	C. $	12.92	13.39
Denmark	D. Kroner	77.50	78.90
France	Franc	59.10	60.30
Hong Kong	H.K. $	64.70	66.70
Italy	Lira	12 570	12,770
Japan	Yen	2430	2480
Malaysia	M. $	25.40	26.20
Netherlands	Guilder	27.20	27.70
Norway	N. Kroner	63.40	61.60
Singapore	S. $	23.10	23.80
Sweden	S. Kronor	59.50	60.70
Switzerland	S. Franc	21.10	21.60
UK	£	5.9425	5.9930
USA	$	10.81	11.01
West Germany	D.M.	24.50	25.00

from the world capital markets, they should go in for it, especially for projects with high profitability and short gestation periods.

India has an excellent rating in the international capital markets. "Euromoney" has placed India in the No 9 position in a list of 67 borrowers. This is because India's economy is basically strong, has high debt servicing capability and oil has a major place in the composition of its imports. Thus India is qualified to borrow heavily, but she is an ambivalent borrower yet. It is time she became an eager borrower.

The opportunity cost view of Eurodollar borrowing emphasises that Eurodollars will supplement the existing resources and consequently will enable the country to take up new projects resulting in accelerated growth and development. Two specific arguments have also been advanced: First, India will soon face acute competition from other countries, notably China, for funds available from traditional sources including quasi-commercial ones like the International Financial Corporation. She has been receiving 40 per cent of funds from the above sources over the last few years.

Shortages and surpluses

Pig iron

Pig iron in short supply all over the country, adversely affecting many industrial units. Foundry units and units making spun pipes in Gujarat and Maharashtra on verge of closure for lack of pig iron.

Cement

Drainage work undertaken by the Lonavala Municipal Council in Maharashtra came to a halt due to non-availability of cement.

Acetic acid

Industries based on acetic acid faced with closure due to the acute shortage of this chemical.

Aluminium

Thirty thousand tonnes of aluminium piled up with the four major manufacturers.

Refrigerators

Nearly 65,000 refrigerators lying unsold with four large manufacturers.

As I see it

Indians working in West Asia

THERE are about one million Indians in the West Asian countries. Of them 1,18,000 have already become citizens of the countries in the region—99,500 in Yemen People's Democratic Republic, about 10,000 in Iraq and the rest in other countries. Another 80,000 Indians have settled in the countries of West Asia, although they still retain Indian citizenship—40,000 in Saudi Arabia, 17,000 in Oman, 15,000 in Bahrain and the rest elsewhere.

The Indians, who have gone to the West Asian countries with work permits during the past thirtyfour years, are estimated to number 5,66,000—2,50,000 in the United Arab Emirates (UAE), 80,000 each in Saudi Arabia and Kuwait, 68,000 in Oman, 30,000 in Qatar, 25,000 in Bahrain, 23,000 in Iraq, 5,000 in Yemen Arab Republic, 3,500 in Jordan and 1,000 in Yemen People's Democratic Republic.

Many Indians in these countries are subjected to various forms of harassment and exploitation according to a recent Estimates Committee report. According to the Government of India, in Saudi Arabia Indian workers are often confronted with the substitution of contracts with less favourable terms and conditions of employment, payment of salaries at lower rates than contracted, termination of services without payment of dues and return fare, deployment of workers on duties other than contracted for and poor working and living conditions. A number of Indian workers employed by a private company in Lebanon was subjected to beatings and inhuman treatment.

In Kuwait the passports of the Indian workers are retained by the employers who do not return the passports even when the employees leave their employment. The employers often deprive the employees of the document of the agreement between the employers and the employees on one pretext or the other. Persons are often compelled to do other jobs than contracted for. In Iraq the problems faced by the Indians are of a similar nature.

Women are subjected to worse treatment including molestation. Besides, Indian workers are arrested and put in prison on one charge or another. Instances are not rare when the Indian embassy in the country concerned was not informed of the arrests made—even when the Indian Government found the arrests were completely unjustified. The strange thing is that the recruiting company which was responsible for the unjustifiable arrest of a large number of Indian workers in Jordan has again been permitted by the Government of India to carry on its nefarious operations through recruiting Indian labourers. In Jordan money is extracted from Indian workers to provide them residence permits.

The worst aspect of the situation is that in several West Asian countries the Indian workers have been subjected to exploitation—not by the West Asian employers but by the Indian employers—with implicit connivance of the Government of India. The Secretary of the Government of India explained the Indian Government's inaction: "Unfortunately our hands are tied in this matter because we cannot really blacklist an employer just for this. Perhaps he is under taking a project abroad worth crores of rupees; and if we do not permit the implementation of the project it will be stopped..." There is no way to get away with the notion that only Indian private sector companies indulge in these types of malpractices. Reflecting the growing convergence between the private sector and the public sector managerial malpractices, the Indian public sector organisations also maltreat Indian labourers recruited by them to work abroad. Naturally this prompts Arab employers to feel justified in maltreating Indian workers. This, then, is the price the country pays for the socalled project exports."

Subhash Chandra Sarker

INDIAN ECONOMY: BASIC INDICATORS

By Commerce Research Bureau

WEEKLY INDICATORS

Wholesale Price Index (1970-71=100)

	During the week ended				Percentage variation			
	Aug. 29 1981	Aug. 22 1981	Aug. 1 1981	Aug. 30 1980	Over a week	Over a month	Over a year	Over two years
Manufactured products ..	273.0	272.2	274.0	264.5	—1.5	—0.4	3.2	25.7
Primary articles	271.2	273.2	272.8	235 4	—0.8	—0 6	15.2	30.7
Fuel, power, lubricants etc.	437.5	437.5	428 7	355.7	—	2.1	23.0	56.4
All commodities	286.2	289.2	286.6	260.1	—1 0	—0 1	10.0	30 2

Money and Banking

(Rs crores)

	During the week ended				Percentage variation			
	Sept. 4 1981	Aug. 28 1981	Aug. 7 1981	Sept. 5 1980	Over a week	Over a month	Over a year	Over two years
Money supply (M3) (b) ..	58,593	58,271	58,171	49,350	0.6	0 7	18 7	36 7
Bank credit	26,764	26,791	26,843	21,898	—0 1	—0 3	22 2	37.0
Aggregate deposits ..	41,073	40,988	40,556	33,949	0 2	1 3	21 0	40 0
Foreign exchange reserves(a)	4,221	4,247	4,859	5,655	—0 6	—13 1	—25 4	—27 8

MONTHLY INDICATORS

	Latest month			Previous month	Percentage variation over previous month	Recent trend(c) (Per cent)
	Unit	Month	Amount/ Index			
Industrial production (crude Index)	1970=100	July 1981	151 7(a)	145.5 (a)	4.3	14 6
Exports	Rs. crores	May 1981	383	627	—38.2	—15 7
Imports	Rs crores	May 1981	559	972	—42.5	—22.1
Trade balance	Rs crores	May 1981	—176	—345	—	—
Foreign exchange reserves (a)	Rs crores	August 1981	4,247	4,859	—12.6	—11 0
Wholesale price Index ..	1970-71=100	August 1981	287 4	283.7	1 3	13 0
Consumer price Index for Industrial workers ..	1960=100	July 1981	447	439	1 8	13.6
Unemployment(d)	Lakhs	Feb 1981	162	162	—	...

ANNUAL INDICATORS

	Unit	1980-81	1979-80	1973-74	Percentage variation in 1980-81 over 1979-80	Annual rate of growth between 1973-74 and 1980-81
Real national Income ..	1970-71=100	136.6(a)	126.7	105.1	7.8	3.8
Real per capita Income ..	1970-71=100	110,9(a)	104.8	98.1	5.8	1.8
Agricultural production	Triennium ending 1969-70=100	154.4	116.5	112.4	15.5	2 6
Foodgrains production ..	Million tonnes	133.0	109.0	105.0	22.0	3.4
Industrial production ..	1970=100	154.4	148 1	112.6	4.2	4 6
Exports	Rs crores	6,675	6,459	2,523	3.3	14.9
Imports	Rs crores	12,210	8,908	2,955	37.1	22.5
Trade ba'ance	Rs crores	—5,535	—2,449	—432	—	—
Foreign exchange reserves*	Rs crores	5,316	5,706	764	—6 8	31.9
Money supply (M3) (b) .*	Rs crores	55,221	46,800	17,571	18 0	17 8
Bank credit	Rs crores	25,270	21,537	7,339	17.3	19.3
Aggregate deposits ..	Rs crores	37,847	31,759	10,139	19.2	20.7
Wholesale prices (average)	1970-71=100	256.8	217.6	139.7	18.0	9.1
Consumer price Index for industrial workers*	1960=100	420	373	275	12.6	6.2
Unemployment (d)**	Lakhs	162	143	82	13.3	10.2

Notes : (a) Estimated by Commerce Research Bureau. (b) Includes currency with the public, deposit money of the public and time deposits with banks. (c) Figures indicate percentage change during the current fiscal year up to the latest month indicated as compared with the corresponding period in the preceding fiscal year. (d) Data relate to number of jobseekers on the live register of employment exchanges. * Financial year-end data. ** Calendar year-end data.
(. . .) = Not available

This proportion is now likely to declin
Secondly, the attitude of the Reaga
administration in the United States whic
favours bilateral aid to that channelle
through multilateral agencies like th
World Bank and its associates. The thi
one of course is that Eurodollar borrov
ing is untied credit and would not cau
complications such as in the case of th
Thal Vaishet fertiliser project—which wa
to be originally financed by the Worl
Bank.

An important step (in fact, an esser
tial step—for substantial external con
mercial borrowing) is the creation of a
international capital market in Indi
such as being advocated by the Chairma
of the State Bank of India. Mr H. T
Parekh, a distinguished banker, himse
supports Mr Nambiar's case in the fo
lowing words: "India cannot hope t
reach the status of London and Nev
York, not even Singapore and Hongkon
in the near future. But it has all th
potential of reaching the important sta
tus in the field of international financin
if a concerted effort is made to attai
such a position, psychologically and phy
sically, by dismantling the superstructur
of regulations and controls".

The Bengal Chamber study ha
stressed another important point tha
Eurodollar loans should cover interna
financial needs as well, not merely th
import cost of projects. Capital at hom
is scarce and it may not be possible i
all cases to raise the matching rupee resources. In the absence of adequat
rupee funds, a Euromoney loan would no
serve any useful purpose.

Unofficial foreign currency rates in Hongkong

(Hongkong $ as on Sept. 15, 1981)

	High	Low	T.T.
Australian $	6 83	6 80	6 9600
Belgian Franc (100)	14 00	13.00	15 525
British £	10.80	10. 55	9 250
Burmese Kyat (100)	25.00	15 00	
Canadian $	5 00	4 95	5 0755
French N.F	1.035	1.00	1.0555
Indian Rupee (100)	58 00	54.00	67.10
West German DM	2 50	2.44	2 5440
Indonesian Rupiah (100)	0.95	0 85	
Italian Lira (100)	4 90	4 60	
Japanese Yen (100)	2.59	2 565	2 6340
Korean Won (100)	0.88	0.78	
Malaysian $	2.53	2 500	2 5650
Netherlands Guilder	2.26	2.20	2 2900
New Zealand $	4.95	4.75	5.0115
Pakistan Rupee (100)	4 30	3.80	6 245
Philippine Peso	0.72	0.70	0 7695
Singapore $	2 78	2.75	2 8160
South African Rand	5 70	5 30	6 3960
Sri Lanka Rs (100)	30.00	22.00	
Swiss Franc	2.89	2.85	2 7920
Taiwan $ (100)	15.40	15 10	
Thai Baht (10	26.80	26 20	

MONSOON, CROP AND COMMODITY SURVEY: AUGUST 1981

Erratic monsoon dampens kharif prospects

By COMMERCE RESEARCH BUREAU

DURING August there was an uneven spread of the rainfall over the weeks. Even though the quantum of rainfall during the current monsoon till August-end was quite satisfactory, the long breaks in rains during the month over several areas were not reflected in the overall position. As a result of the erratic behaviour of the monsoon, the prospects of a good kharif crop were substantially reduced.

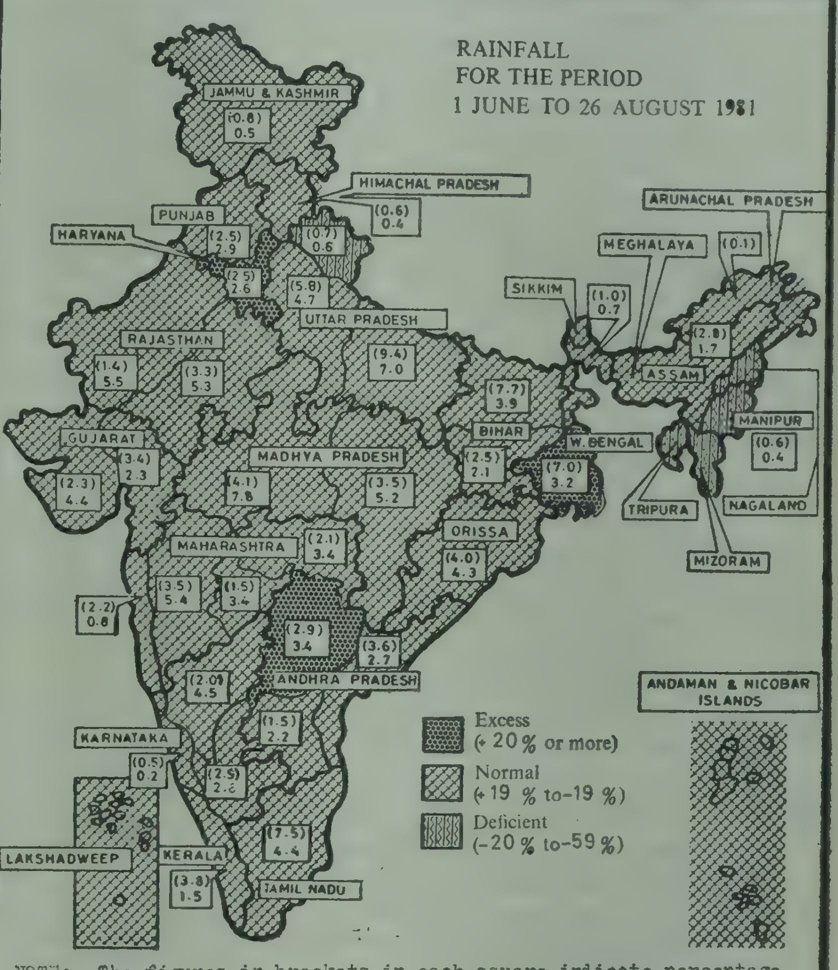
During the period June 1 to August 26, 1981 rainfall was good (excess or normal) in 33 meteorological sub-divisions accounting for 98.7 per cent of the population and 99 per cent of the net sown area in the country as compared with 31 sub-divisions accounting for 91 per cent of the population and 95 per cent of the net sown area last year. Rainfall was deficient in two sub-divisions covering 1.3 per cent of the population and one per cent of the net sown area as compared with four sub-divisions with nine per cent of the population and five per cent of the net sown area in the corresponding period last year. An analysis of distribution of rainfall during the month showed that the rainfall was scanty in only three sub-divisions during the week ended August 19 (accounting for three per cent of the population as also net sown area). However, the position deteriorated during the next week ended August 26 in that the rainfall was scanty in as many as 13 sub-divisions which accounted for 37 per cent of the population and 47 per cent of the net sown area.

Floods affected large areas in the country. Particularly affected were the states of Assam, Bihar, Gujarat, Madhya Pradesh, Rajasthan and Uttar Pradesh. The death toll in the floods so far (up to August-end) was 553. The number of villages affected was 22,230 while the cropped area affected was 16.28 lakh hectares. The population affected was about 19 million. The total loss in terms of damage to crops and public property was estimated at Rs 628 crores. The timely rains helped to improve the drought conditions in Haryana, Karnataka and Orissa. However, several areas in Madhya Pradesh, Maharashtra, Punjab, Rajasthan and Tamil Nadu suffered from drought resulting in lowering down the estimates of kharif production.

Besides an upward revision of its recommended price for ommon paddy from Rs 113 to Rs 115 per quintal reported arlier, the Agricultural Prices Commission (APC) revised upwards its earlier recommended procurement prices of kharif oarse grains *viz* jowar, bajra, maize and ragi from Rs 115 o Rs 116 per quintal. The price of groundnut-in-shell was iked from Rs 270 to Rs 273 per quintal, soyabean (black) rom Rs 210 to Rs 213 per quintal, soyabean (yellow) from Rs 230 to Rs 234 per quintal and sunflower seed from Rs 250 o Rs 253 per quintal. The procurement price for cotton was aised from Rs 375 to Rs 380 per quintal. The Commission id not suggest any change in the procurement prices of Rs 5.50 per quintal for sugarcane, Rs 8.50 per kg for light soil obacco and rupees eight per kg for black soil tobacco.

The rice procurement during the 1980-81 kharif marketing eason up to August 22, 1981 was 5.7 million tonnes as against .8 million tonnes during the corresponding period last year. Wheat procurement till the same date during the rabi marketng season 1981-82 (April to March) was 6.5 million tonnes as against 5.8 million tonnes during the corresponding period last year.

Progress of Monsoon


RAINFALL
FOR THE PERIOD
1 JUNE TO 26 AUGUST 1981
JAMMU & KASHMIR
(0.8) 0.5
HIMACHAL PRADESH
(0.6) 0.4
PUNJAB
(2.5) 2.9
HARYANA
(2.5) 2.6
(0.7) 0.6
(5.8) 4.7
UTTAR PRADESH
(9.4) 7.0
RAJASTHAN
(1.4) 5.5
(3.3) 5.3
ARUNACHAL PRADESH
MEGHALAYA
(0.1)
SIKKIM
(1.0) 0.7
(2.8) 1.7
ASSAM
(7.7) 3.9
BIHAR
(2.5) 2.1
W. BENGAL
(7.0) 3.2
MANIPUR
(0.6) 0.4
TRIPURA
NAGALAND
MIZORAM
GUJARAT
(3.4) 2.3
(2.3) 4.4
MADHYA PRADESH
(4.1) 7.8
(3.5) 5.2
ORISSA
(4.0) 4.3
MAHARASHTRA
(2.1) 3.4
(3.5) 5.4
(1.5) 3.4
(2.2) 0.8
(2.9) 3.4
(3.6) 2.7
ANDHRA PRADESH
(2.0) 4.5
(1.5) 2.2
KARNATAKA
(0.5) 0.2
(2.5) 2.8
LAKSHADWEEP
KERALA
(3.8) 1.5
(7.5) 4.4
TAMIL NADU
ANDAMAN & NICOBAR ISLANDS
Excess (+ 20 % or more)
Normal (+ 19 % to-19 %)
Deficient (-20 % to-59 %)

NOTE: The figures in brackets in each square indicate percentage of the total population (1971) and figures outside the brackets indicate the percentage of the total net sown area (1971-72) in the regions.

Commerce Research Bureau

Map not drawn according to scale

The cotton outlook for the 1981-82 cotton season (beginning on September 1) appeared to be bleak with the estimated production being less and the consumption by the mills being higher. According to the Cotton Advisory Board, the carry-over stock at the end of the 1981-82 season would be only 8.72 lakh bales, *i.e.* not even one and a half months requirements of the textile mills in the country. Of the one lakh bales of medium staple cotton to be imported from Pakistan only 49,500 bales were reported to have been contracted for import so far.

Ships carrying imported sugar started arriving at the Indian ports during the month. This helped to some extent in bringing down domestic sugar prices. However, no arrangements could be made for the distribution of imported sugar because of difference of opinion between the Government and the trade on the price at which the imported sugar would be sold.

The following paragraphs present the Statewise and cropwise position for the month of August 1981 :

ANDHRA PRADESH

The Godavari threatened several villages on its banks even as the flood waters entered Bhadrachalam town on August 11. People in East and West Godavari districts, especially in the low lying areas, were alerted. Two villages in Srikakulam district were affected by flood waters of the Vamsadhara river.

During the 1981-82 rice crop year (April 1981 — March 1982) the Food Corporation of India (FCI) procured 1.2 lakh tonnes of paddy till August-end 1981 as compared to thirty thousand tonnes during the corresponding period last year. Procurement of rice was higher by 1.5 lakh tonnes over that of last year. The FCI proposed to purchase an additional 50,000 tonnes before the end of the current crop year.

The Andhra Pradesh State Cooperative Rural Irrigation Corporation was set up with the object of making about eight lakh open irrigation wells in the State operational. Around rupees five crores would be spent on the first phase of the project to tap groundwater potential.

ASSAM

The flood situation in the State continue to be grave as a result of the fourth wave of floods. The Burhi Dihing, a tributary of the Brahmaputra inundated over 100 villages in Dibrugarh subdivision of upper Assam. Standing crops including sali paddy seedlings were damaged in the sub-division. Another tributary Gainadi submerged new areas in Lakhimpur district.

According to officials in the State Directorate of Agriculture, jute production in the State this season was expected to be more or less the same as last year, *viz*, 9.5 lakh bales.

Tea producers in Cachar district were reportedly facing a serious problem in despatching their tea because of difficulty in getting railway wagons. This had worsened their liquidity position.

The State Trading Corporation decided to set up an edible oil depot at Gauhati to facilitate quicker supply of edible oils to the north-eastern region.

BIHAR

The flood situation in the State was critical during the month as a result of the rise in the levels of all major rivers. Twenty out of 33 districts were affected by floods. While a population of 5.71 million in more than 6,000 villages was affected, standing crops in 5.45 lakh hectares were damaged. The total loss was estimated at Rs 100 crores. The State Government distributed 9.66 lakh quintals of foodgrains to flood victims.

Land owners in the State would be issued pass-books containing information regarding size of their holdings and other particulars. The pass-books would enable them to obtain loans from cooperative banks and other agencies without delay. The Bihar Tenancy Act would be amended suitably to incorporate provisions concerning distribution of pass-books.

GUJARAT

The Chief Minister, Mr Madhavsinh Solanki, stated that the recent heavy rains caused an estimated loss of Rs 50 crores. About 880 villages were affected 5,000 head of cattle lost and 737 houses collapsed. The floods claimed 105 lives. He urged the Centre to send its team to decide the quantum of financial aid to the State for flood relief. According to the Chief Minister the rainfall had proved beneficial for the kharif crops except in Mahesana district where crop damage was extensive.

The cotton crop in the State was estimated at 17.14 lakh bales during the 1980-81 season as against 16.86 lakh bales in the previous year. The Cotton Corporation of India (CCI) bought 2.13 lakh bales from the State during 1980-81. The State hoped to harvest 21.40 lakh bales of cotton in the 1981-82 season of which the CCI would purchase as much as 3.50 lakh bales.

The State Government decided to continue the experimental crop insurance scheme during 1981-82 in a new form with the cooperation of the General Insurance Corporation in 28 talukas in 12 districts. During the year groundnut, cotton (except hybrid varieties), paddy and bajra would be covered under the scheme.

The State Government pursuaded the vanaspati manufacturers to voluntarily reduce despatches to other States to 20 per cent of their total production with effect from August 18, 1981. The balance 80 per cent would be sold in the State.

The State urged the Centre to fix the profit margins for oilseed millers, wholesalers and retailers in all oil producing States so as to bring about parity in prices and margins.

HARYANA

Rains during the month saved the paddy crop in the State. The rain was particularly of great help in the dry belt of Faridabad, Gurgaon, Jind, Mahendragarh, Hisar and Rohtak districts raising hopes of bumper paddy crop. The grain storage capacity in the State increased by 0.15 lakh tonnes to 1.59 lakh tonnes during the past one year.

Paddy crop insurance was introduced in Kurukshetra district for the first time on an experimental basis. Under the scheme a farmer would have to insure paddy crop up to Rs 2,250 and pay Rs 100 as premium. Total insurance paddy crop in the district would be abo rupees four lakhs.

HIMACHAL PRADESH

According to a finding of -a si member study team appointed by t Union Ministry of Commerce, tea ga dens in several areas of the State wou be totally wiped out unless the Gover ment took drastic measures to retrie the situation. The team found that t growers were gradually shifting to oth cash crops due to the high cost of t production.

A 20-year perspective plan f afforestation was submitted by the Sta Government to the Planning Commissio The plan envisaged expansion of t forest cover from the present 20 per ce to 50 per cent.

JAMMU & KASHMIR

The floods in the Jammu regio claimed 25 lives and washed away hun reds of cattle.

The Jammu and Kashmir Agr Industries Corporation would procu fresh hops from the growers at the ra of Rs 11 a bag during this season. T production of fresh hops was estimat at 2,000 tonnes.

KARNATAKA

Flash floods were reported in Myso district of the State owing to the ove flowing of the Cauvery and Kabini river Army boats had to be deployed to pro vide relief to the marooned people i twelve villages. The floods in the Netra vathi river also affected the Dakshi Kannad district.

The dry spell in the southern part of the State ended with the good rainfal received during the month.

The State Government directed th various purchasing agencies to buy bid tobacco at the rate of Rs 12 per kg. A a result the tobacco growers of Nipan suspended their stir for remunerativ prices.

KERALA

The Kerala Assembly passed the Land Reforms (Amendment) Bill to free cultivating tenants from the liability to pay rent if resumption application fo cultivation of the lands was rejected by the land owners.

The Kerala State Cooperative Marketing Federation started procuring the entire cocoa produced in the State directly from the farmers. The Cocoa Marketing and Processing Society at Kottayam had been asked to procure wet cocoa beans from the farmers at the rate of rupees three per kg. The Government would give to the farmers a subsidy of a rupee per kg of wet beans sold to the society.

Progress of the South-west Monsoon during August 1981

State/Region	Population 1971 Census (million)	Net area: 1971-72 million hectares			Kharif crops		Rainfall for the period June 1 to August 26, 1981				Rainfall for the week ending August 1981			
		Sown	Irrigated	Percentage of net irrigated area to net sown area	Food	Cash	Normal (mm)	Actual (mm)	Departure from the normal (Percentage)	Over all position	5th	12th	19th	26th
Andhra Pradesh	43.50	11.27	3.00	26.6	Rice, jowar, bajra, maize and ragi	Castorseed, groundnut, tobacco, mesta, cotton and chillies								
Coastal	19.72	3.71	1.88	50.1			373	369	—1	N	E	N	N	S
Telangana	15.81	4.63	0.66	14.3			542	667	23	E	E	S	E	S
Rayalaseema	7.97	2.93	0.48	16.4			255	246	—4	N	E	S	S	S
Assam	14.63	2.24	0.57	25.4	Rice and maize	Jute and tea	1109	1007	—9	N	N	D	D	E
Bihar	56.35	8.28	2.38	28.7	Rice and maize	Jute, mesta and potato								
Plateau	14.23	2.90	0.21	7.2			813	772	—5	N	N	S	N	E
Plains	42.12	5.38	2.17	40.3			776	856	10	N	E	S	D	E
Gujarat	31.39	9.32	1.21	13.0	Bajra, jowar, rice and maize	Cotton, tobacco, groundnut and castorseed								
Gujarat region	18.47	3.26	0.48	14.7			597	685	15	N	S	E	E	S
Saurashtra and Kutch	12.92	6.06	0.73	12.0			433	407	—6	N	S	E	E	S
Haryana (Including Chandigarh & Delhi)	14.37	3.67	1.57	42.8	Bajra, maize, rice and jowar	Cotton and sugarcane	368	509	38	E	N	D	D	S
Himachal Pradesh	3.46	0.55	0.09	16.4	Maize, rice and ragi	Apples, potato and ginger	1045	890	—15	N	D	D	N	D
Jammu and Kashmir	4.62	0.71	0.26	36.6	Maize and rice	Apples and saffron	297	309	4	N	D	D	S	D
Karnataka	29.30	10.33	1.38	13.4	Ragi, jowar, bajra and rice	Safflower, groundnut, cotton, coffee and sugarcane								
Coastal	2.79	0.31	0.11	35.5			2554	2962	16	N	E	D	E	E
Interior North	10.72	6.30	0.45	7.1			372	382	3	N	E	S	N	S
Interior South	15.79	3.72	0.82	22.0			243	205	—16	N	E	N	E	D
Kerala	21.35	2.19	0.44	20.1	Rice, ragi and tapioca	Tea, coconut, coffee, arecanut, rubber and black pepper	1462	1721	18	N	D	N	E	E
Madhya Pradesh	41.65	18.46	1.64	8.9	Jowar, maize, rice and bajra	Sesamum, groundnut, cotton and sannhemp								
East	19.31	7.38	0.75	10.2			895	763	—15	N	N	D	D	N
West	22.34	11.08	0.89	8.0			698	643	—8	N	D	E	E	S
Maharashtra	51.31	16.58	1.34	8.1	Jowar, bajra, ragi and rice	Cotton, safflower, groundnut, chillies and sugarcane								
Konkan and Goa	12.30	1.00	0.04	4.0			2112	2338	11	N	E	E	D	D
Madhya Maharashtra	19.17	6.96	0.74	10.6			355	395	11	N	D	E	E	D
Marathwada	8.07	4.31	0.27	6.3			429	363	—15	N	E	E	N	E
Vidarbha	11.77	4.31	0.29	6.7			736	699	—5	N	N	E	D	S
Manipur	1.07	0.14	0.07	50.0	Rice	Chillies	—	—	—	—	—	—	—	—
Meghalaya	1.01	0.16	0.04	25.0	Rice	Potato, Jute and mesta	—	—	—	—	—	—	—	—
Nagaland	0.52	0.06	0.01	16.7	Rice	—	—	—	—	—	—	—	—	—
Orissa	21.95	6.12	1.15	18.8	Rice, ragi and maize	Castorseed, sesamum, jute and mesta	830	713	—14	N	N	E	N	D
Punjab	13.55	4.08	2.96	72.5	Maize, bajra and rice	Cotton, sugarcane, groundnut and potato	332	345	4	N	D	S	N	S
Rajasthan	25.77	15.26	2.17	14.2	Bajra, maize and jowar	Cotton, sesamum and sannhemp								
East	17.93	7.48	1.44	19.3			473	502	6	N	D	N	N	S
West	7.84	7.78	0.73	9.4			217	176	—19	N	S	E	D	NR
Tamil Nadu (Including Pondicherry)	41.67	6.35	2.71	42.7	Ragi, rice, bajra and jowar	Tea, chillies, groundnut, sesamum, cotton and sugarcane	174	197	13	N	D	S	N	D
Tripura	1.56	2.40	0.02	0.83	Rice	Jute, mesta and tea	—	—	—	—	—	—	—	—
Uttar Pradesh	88.34	17.32	6.99	40.4	Maize, bajra, rice and jowar	Sesamum, potato and sugarcane								
East	51.97	9.87	3.70	37.5			657	691	5	N	E	S	D	E
West (Plains)	32.55	6.58	3.15	47.9			591	535	—9	N	N	D	D	S
West (Hills)	3.82	0.87	0.14	16.1			1155	906	—22	D	N	S	D	S
West Bengal	44.33	5.71	1.49	26.1	Rice	Jute, mesta, tea and potato								
Sub-Himalayan and Sikkim	5.57	0.97	0.12	12.4			1674	1508	—10	N	N	D	D	E
Gangetic	38.76	4.74	1.37	28.9			795	1061	33	E	N	D	E	E

NOTES: E = Excess, i.e. + 20 per cent or more N = Normal, i.e. + 19 per cent to — 19 per cent D = Deficient, i.e. — 20 per cent to — 59 per cent S = Scanty, i.e.—60 per cent or less NR—No rain

Figures of rainfall for Assam include also those for Meghalaya

The State Government decided to exempt tea plantations from the additional plantation tax which was levied in the 1981-82 budget. The Chief Minister met the Prime Minister on August 24, 1981 and sought her intervention to mitigate the plight of the peasantry in the State caused by the imports of coconut oil, cocoa and rubber.

MADHYA PRADESH

The State was lashed by two waves of floods during the month resulting in a loss of 14 lives. The Narmada and Tati rivers were in spate and inundated low-lying areas. Khargone town received 35 cms of rain in 30 hours on August 16, a record for the last three decades. The heavy downpour resulted in flooding of low-lying areas and house collapses.

The State Government ordered immediate measures to save the drought affected paddy crop in Raipur, Durg and Rajnandgaon districts. It sanctioned all available water from irrigation tanks in Raipur so that at least 1.75 lakh hectares of standing paddy crop in the district could be saved.

An integrated soyabean project costing Rs 27 crores would be set up in Madhya Pradesh and Uttar Pradesh which would be financed by the European Economic Community (EEC) to the extent of Rs 17.40 crores. Of this, Madhya Pradesh would receive Rs 13.50 crores for four processing units with an annual handling capacity of 2.4 lakh tonnes of soyabean and a refinery/vanaspati unit. The balance amount of Rs 9.60 crores would be provided by the National Cooperative Development Corporation, the two State Governments and the implementing cooperatives.

MAHARASHTRA

Kharif crops in different parts of the State were affected by both deficit and excess rains. While in the Marathawada region the kharif crop was affected by dry conditions, in the Vidarbha region the crops were affected by excess moisture. The Marathawada region also experienced acute scarcity of water and fodder.

The International Development Association (IDA) agreed to advance a loan of Rs 63 crores for Purna and Jayakwadi irrigation projects, including the command area development in the State.

The Chairman, Khar Lands Development Committee said that a Rs 21-crore programme for the development of khar (salty) lands in the Konkan region would be recommended soon to the State Government. Under the programme about three to four lakh hectares of land would be developed through the construction of a bund-cum-road to run parallel to every creek skirting khar lands. There were about 60 such creeks.

Procurement of new crop kapas under the State's Monopoly Cotton Procurement Scheme commenced on August 20, 1981 in the Phaltan-Baramati region. The farmers would be paid an ad hoc advance price for the kapas tendered under the Scheme till the cotton coordination committee recommended the guaranteed prices for different varieties. The State Government promulgated an Ordinance extending by one more year the duration of the Maharashtra Raw Cotton Act 1971 up to June 30, 1982, and making certain amendments to the Act which had expired on June 30, 1981. A bill to replace the Ordinance was introduced in the State Legislature subsequently. The purchases of kapas under the scheme during the last cotton season (1980-81) were 65.15 lakh quintals. The target of 17.47 lakh bales of cotton procurement was fixed by the State Government for the 1981-82 cotton season.

The Bombay Oilseeds and Oils Exchange decided on August 18, to introduce a voluntary price ceiling for groundnut oil. It fixed a ceiling of Rs 165.36 per 10 kg inclusive of salestax and Rs 16.75 per kg on retail basis. Subsequently the State Government decided to distribute groundnut oil through fair price shops at Rs 16 per kg, the quantum of oil being one kg for every family ration card.

The Maharashtra State Cooperative Marketing Federation purchased onions worth Rs 21.71 crores by July-end this year.

The State Government accepted the expert committee's recommendations to give 50 per cent capital subsidy to small and marginal farmers for mango plantations. The capital subsidy would be given to farmers for only two hectares of land. Under the scheme a loan of Rs 14,000 per hectare would be given for mango cultivation. Out of this amount, Rs 7,000 would be in the form of capital subsidy. An interest of 10.25 per cent per annum would be charged on the remaining amount. The State Government also agreed to the recommendation of the committee to give loans to farmers for all types of fruits for the first seven years. The loans would be recovered from the eighth year.

MANIPUR

The National Productivity Council prepared a credit plan for the State with outlays of Rs 21 crores for 1981 and Rs 23 crores for 1982 to accelerate the development of industrial, agricultural and service sectors.

The State fixed a kharif production target of 3.70 lakh tonnes of rice which it hoped to reach despite scanty rainfall in certain areas.

ORISSA

The drought spell in the State ende when a severe cyclonic storm lashed th coastal districts of the State on Augus 8. The Vamsadhara and Rushikuly rivers were in spate as a result of th storm. About five lakh persons in low lying areas in the river basins in Korapu and Ganjam districts were asked to evacuate. The storm claimed two lives an injured several others.

Earlier the drought had affecte minor millets, pulses and oilseeds crop in Bolangir, Kalahandi, Sambalpur, Ganjam and Koraput districts.

PUNJAB

The dry spell in the State cause concern for the kharif foodgrains production. Paddy transplantation was badl delayed due to the weak monsoon. Th State was also facing water scarcity together with power shortage. As a resul of the prolonged dry spell, kharif padd production was expected to fall much short of the target of 34 lakh tonnes.

RAJASTHAN

Though the State was lashed by heavy rains causing floods, famine loomed large as the monsoon was coming to a close. Rainfall was very much deficient in 13 of the 26 districts of the State.

The flood damage in the State was estimated at Rs 240.28 crores in the agriculture sector alone. The number of villages affected by flood was 1,576 having a population of 7.88 lakhs. Standing crops on 3.68 lakh hectares were destroyed while about 2.18 lakh hectares of cultivable land was rendered unfit for growing crops due to heavy silt deposit. As many as 31,200 head of cattle perished in the floods. Irrigation tanks numbering 416 were damaged and the Irrigation Department of the State had prepared an estimate of Rs 12 crores for their repairs. The Chief Minister estimated the cost of flood relief by the Centre at Rs 75 crores.

The Centre released rupees five crores as an interim-Plan grant to the State to meet the immediate need for relief works in the flood affected areas.

A sum of Rs 22.5 crores would be spent on the construction of the second phase of the Rajasthan canal during the current financial year.

As a result of the drought the kharif foodgrains output was expected to fall short of the target of 35.65 lakh tonnes by 30 per cent.

TAMIL NADUE

Fourteen out of sixteen districts of the State were reported to be gripped by acute drought. The State Civil Supplies Corporation had undertaken massive rice purchases from the States of Andhra

Pradesh, Madhya Pradesh, Punjab and Orissa. About 80,000 tonnes of rice was moved by road and two lakh tonnes by rail to the drought affected districts.

The State proposed to continue the procurement policy for *kuruvai* paddy — 40 per cent levy on paddy and milling trade. The cooperatives would also be asked to enter the open market for direct purchases at the open market prices.

A new short-duration, high-yielding rice variety IR 50 developed by the International Rice Research Institute and reported to be ideally suited to the State was introduced in the State. The short-statured rice variety was not season-bound and was highly resistant to pests and diseases. It would have a yield potential of 7,500 per hectare in 105 days.

The State Government had drawn up schemes to be implemented with a massive Rs 1,005 crores loan from the International Development Association (IDA) a subsidiary of the World Bank. The schemes, among others, were for provision of drinking water and improvement of irrigation tanks.

The State Agriculture Department launched a special programme to raise pulses production over one lakh hectares in Coimbatore district. The scheme envisaged supply of necessary seeds, fertilisers and plant protection chemicals at subsidised prices to the growers.

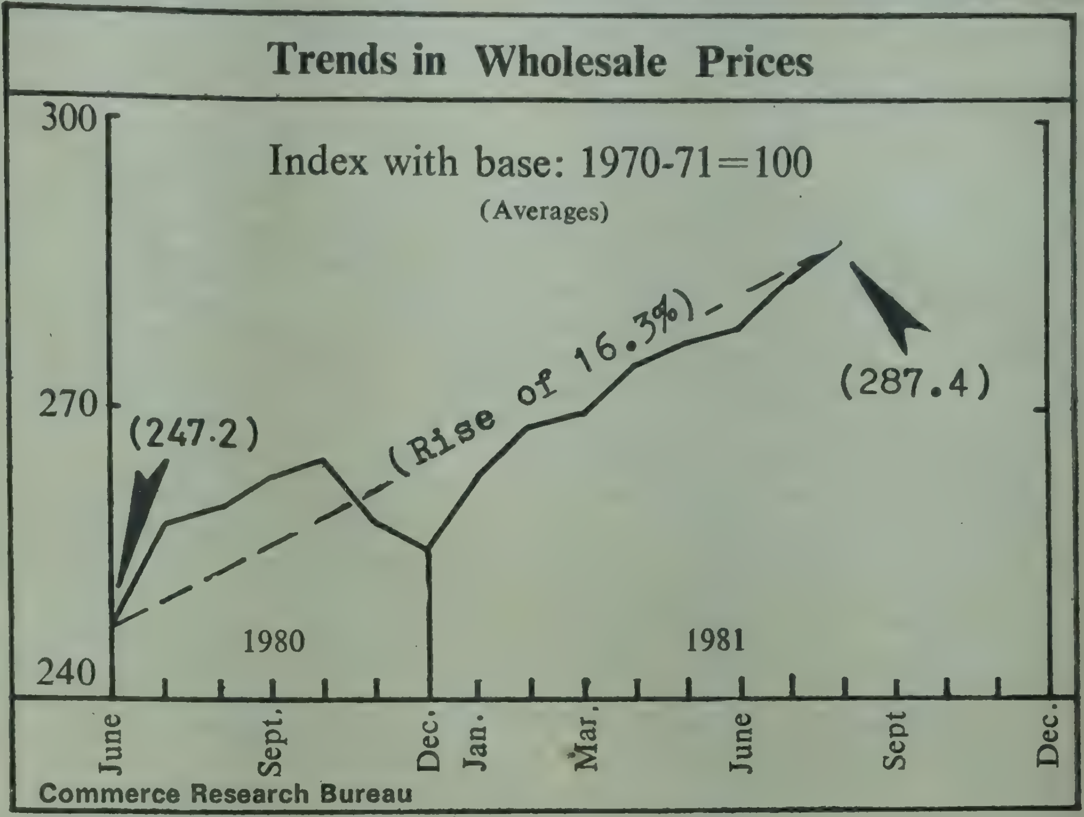
The State launched a five-year farm training and extension programme. The World Bank would provide 70 per cent of the estimated cost of Rs 36.47 crores. The balance would be shared between the Centre and State Government.

The State Government extended its old age pension scheme to cover destitute agricultural labourers aged sixty and above. As a result the number of recipients would increase from 1.5 lakhs to two lakhs.

UTTAR PRADESH

Fresh floods inundated new areas in the eastern districts with the swollen Ghagra and Rapti rivers ravaging vast areas. In all, 12,533 villages in 31 districts and an area of over 17 lakh hectares including cropped area of over six lakh hectares were affected. The death toll in the current floods mounted to 261. The total population affected was about nine million. The loss of property was estimated at Rs 237.40 crores. The State sought Central assistance to the tune of Rs 216.74 crores.

The State Government drew up a Rs 107-crore programme for undertaking social forestry, afforestation and other schemes in the State during the Sixth Plan period. The programme sought to initiate a series of measures which would increase the area under various kinds of



Commerce Research Bureau

PRICES IN AUGUST 1981

Persistent rise

THE wholesale price index continued its upward march. At 287.4 the wholesale price index showed an increase of 1.3 per cent over the preceding month. During the first five months (April-August) of the current financial year the average index was higher by 13 per cent over that in the corresponding period of 1980-81.

The rise during the month was mainly attributed to a rise in the prices of copra, raw cotton, raw jute, rubber, groundnut oil, coconut oil, rice bran oil and electricity.

Month	Wholesale price Index (Average) (1970-71=100)	Percentage change
1980		
July	257.8	+4.3
August	260.4	+1.0
September	262.9	+1.0
October	264.6	+0.6
November	258.4	—2.3
December	255.3	—1.2
1981		
January	262.6	+2.9
February	268.1	+2.1
March	269.5	+0.5
April	274.6	+1.9
May	276.8	+0.8
June	278.8	+0.7
July	283.7	+1.8
August	287.4	+1.3

Index number of wholesale prices (Base: 1970-71=100)

Group	Weight in the official index	Aug. 29, 1981	July 25, 1981	Aug. 30, 1980	Percentage variation on August 29, 1981 over	
					July 25, 1981	Aug. 30, 1980
Manufactured products	49.9	273.0	274.1	264.5	–0.4	3.2
Food products	13.3	315.6	324.2	337.1	–2.7	–6.4
Rubber & rubber products ..	1.2	277.8	274.1	253.5	1.3	9.6
Basic metals, alloys & metal products	6.0	308.7	304.8	269.4	1.3	14.6
Machinery & transport equipment ..	6.7	263.1	259.4	238.0	1.4	10.5
Primary articles ..	41.7	271.2	270.5	235.4	0.3	15.2
Fuel, power, light & lubricants	8.4	437.5	428.7	355.7	2.1	23.0
All commodities ..	100.0	286.2	285.7	260.1	0.2	10.0

forest plantations from 6.34 lakh hectares as on March 31, 1980 to 8.75 lakh hectares by 1984-85.

WEST BENGAL

Heavy rains in Midnapore district during the month submerged 36,000 hectares of cultivated land thereby destroying crops. The Contai sub-division suffered the most. However, kharif crop prospects in the State as a whole were bright with 80 per cent of the transplantation of *aman* paddy having been completed.

The State Government decided to encourage farmers to engage in higher production of wheat during the coming rabi season. The Government proposed to provide subsidy to farmers on the purchase of wheat seeds and to distribute a larger number of mini kits during the wheat sowing season.

The State urged the Centre to fix the procurement price for coarse paddy at Rs 125 per quintal and for the fine variety at Rs 130 per quintal. However it wanted that the issue price to the consumers should be maintained at the existing levels by introducing a subsidy element.

The Centre decided to allot 10,000 tonnes of urea to the State during 1981-82 from the Phulpur plant of the Indian Farmers Fertilizers Cooperative Limited. A Rs 35-crore social forestry project was being implemented by the State Government. The project largely financed by the World Bank to the tune of Rs 23 crores aimed at providing wood for fuel to the villagers and fodder for their cattle.

Rice

Rice exports during 1980-81 totalled seven lakh tonnes at an average price of Rs 3,000 a tonne as against the export of five lakh tonnes in 1979-80 at an average price of Rs 2,500 a tonne.

The Centre decided that procurement of paddy and rice under the support price policy would henceforth be only on Central account. Enough purchasing centres would be opened and the State Governments would be provided with adequate funds for purchases on behalf of the Centre.

During the 1980-81 kharif marketing season procurement of rice until August 22, 1981 totalled 56.63 lakh tonnes as against 37.78 lakh tonnes during the corresponding period last year.

In the T'guddem market the price of rice (fine) rose by 4.5 per cent during the month to Rs 310.81-317.57 per quintal.

Wheat

Procurement of wheat during the current rabi marketing season (April 1981-March 1982) until August 22, 1981 amounted to 64.96 lakh tonnes as against 58.35 lakh tonnes during the corresponding period last year. It was reported that 70 per cent of the wheat production in Punjab was affected by disease.

The Plant Institute of Agricultural Sciences, Banaras Hindu University developed a new variety of wheat known as "Malviya Wheat '55'". The new variety was reported to be superior to other wheat varieties in the north eastern-plains in respect of yield, disease resistance, grain quality and adaptability.

The average landed cost of imported US wheat was now estimated at Rs 196.40 per quintal inclusive of ocean freight and incidental expenses of unloading. The break up was: average FOB cost Rs 153.95, ocean freight Rs 36.04 and incidental expenses of unloading Rs 6.40 per quintal. The first shipment of US wheat was expected to arrive in India in September.

The price of wheat (deshi) in the Delhi market declared by eight per cent over the month to Rs 190-210 per quintal.

Jute

A cell for continuous monitoring of the raw jute sector would be set up to ensure remunerative prices to growers. This was recommended by the tchnical workshop on jute industry in Calcutta held during the month.

The ten-member working group on institutional credit to jute growers set up by the Reserve Bank of India under the Chairmanship of Mr P. R. Pradhan was expected to finalise its report by the end of September. The group met in Calcutta on August 26 after a series of discussions and field surveys since its formation.

The Reserve Bank of India extended till September the period of credit given by commercial banks to mills for additional raw jute purchases from the Jute Corporation of India (JCI). The mills would now be given credit to buy raw jute for four more weeks' consumption, over and above the 10 weeks' stock now allowed. The additional credit would not require prior authorisation from the Reserve Bank.

The JCI purchased one lakh bales of raw jute until August-end 1981 during the current jute season which started in July. The Corporation had procured a record quantity of 10.62 lakh bales during the 1980-81 season.

The crisis in the jute mill industry deepened with a sharp rise in stocks of finished products and a steep decline in exports during July—the first month of the 1981-82 season.

The Union Government planned an emergency rescue purchase of one lak bales of B. Twill bags to grant relief t the jute mills.

In the Calcutta market the price o jute (W-S) ruled steady during the mont at Rs 240 per quintal.

Cotton

The Cotton Advisory Board (CAB at its meeting on August 29 tentativel estimated indigenous production at 8 lakh bales for the 1981-82 cotto season as against 76.50 lakh bales i 1980-81. The latest balance sheet was drawn by it as follows:

(Lakhbales)

	1980-81	1981-82
I. **Supply**		
Production	76.50	80.00
Imports	—	1.00
Carryover stock	25.55	13.47
Total I	102.05	94.47
II. **Offtake**		
Mill consumption ..	78.50	80.00
Ex-factory consumption ..	3.00	3.00
Waste spinning units ..	0.45	1.00
Exports (including spill-over)	6.63	1.75
Total II	88.58	85.75
Closing stock (I-II) ..	13.47	8.72

Incidentally the carry-over stock of cotton estimated at 8.72 lakh bales at the end of the 1981-82 would be an all time low.

During the 1980-81 cotton season, the Cotton Corporation of India (CCI) procured 11.93 lakh bales as against the target of 15 lakh bales. The CCI operated through 205 purchase centres. The CCI has fixed a target of 16.12 lakh bales for the 1981-82 season commencing on September 1, 1981.

The Maharashtra State Cooperative Marketing Federation (MSCMF) commenced procurement of new crop kapas under the State's monopoly Cotton Procurement Scheme from Phaltan-Baramati zone. The State would pay an advance price to growers equivalent to the guaranteed prices announced in the official gazette of November 7, 1980 until the procurement prices would be decided by the Cotton Coordination Committee.

The MSCMF invited offers for the sale of 48,894 bales of Fair, X-grade, Kawadi, yellow pickings and other low grades of different varieties of 1980-81 season cotton.

As reported earlier India contracted for the import of one lakh bales of medium staple cotton from Pakistan. The imports would be canalised through the CCI. The Commerce Ministry notified that mills which took the imported cotton would have to either ensure export of textiles to the extent of one kg against 1.4 kg of raw cotton or supply yarn to handlooms. The allocation would be

Spot prices of agricultural commodities: August 1981

(Rs per quintal)

Commodity	Market	Variety	August 31, 1981	July 31, 1981	August 30, 1980	August 31, 1979	Percentage variation on August 31, 1981 over		
							a month	a year	two years
I. Foodgrains									
(1) Rice	Delhi	Basmati	400-600	400-575	325-575	320-600	2.6	11.1	8.7
	Hapur	Basmati	480–520	480–520	450-480	360–380	—	7.5	35.1
	T'guddem	Fine	310.81-317.57	297.30–304.05	290–54–297.30	270.27	4.5	6.9	16.3
(2) Wheat	Bhatinda	Farm	140–150	143–155	135–143	118–123	—2.7	4.3	20.3
	Delhi	Deshi	190-210	200–235	155–175	140–160	—8.0	21.2	33.3
	Rohtak	Dara	140–152	138–155	110–125	115–125	—0.3	24.3	21.7
(3) Barley	Bhatinda	Average	95-107	100–110	100–110	70–77	—3.8	—3.8	37.4
	Hapur	Average	119 125	120–125	120–125	100–105	—0.4	—0.4	19.0
(4) Jowar	Solapur	Average	145-165	145-165	140-155	115-135	—	5.1	24.0
	Karnal	Average	128–145	148–165	116–128	100–116	—12.8	11.9	26.4
(5) Bajra	Ahmedabad	Average	170–175	160–180	115–135	90–110	1.5	38.0	72.5
	Shrirampur	Average	195–218	200-220	130-160	105–130	—1.7	42.4	75.7
(6) Maize	Hapur	Average	140–150	140–148	108–115	95–103	0.7	30.0	46.5
	Karnal	Average	130–150	150–160	112–135	95–105	—9.7	13.4	40.0
(7) Gram	Bombay	Deshi	400–405	425	325	232–238	—5.3	23.8	71.3
	Hapur	Average	310-375	340–380	280–315	170–215	—4.9	15.1	77.9
	Rohtak	Kabli	420-490	410–475	330-410	310–425	2.8	23.0	23.8
II. Fibres									
(1) Cotton	Bombay	Varalaxmi (A)	1,912	1,925	1,687	1,786	—0.7	13.3	7.3
	Bombay	CJ-73	1,378	1,378	844	—	—	63.3	—
	Bombay	L-147(A)	1,575	1,561	1,167	1,153	0.9	35.0	36.6
	Bombay	A-51-9	1,575	1,547	1,174	1,076	1.8	34.2	46.4
	Bombay	Bengal Deshi	1,097	1,069	703	717	2.6	56.0	53 0
(2) Jute	Calcutta	W-5	240	240	217.50	238	—	10.3	0.8
III. Groundnut and its oil									
(1) Groundnut (Kernels).. ..	Bombay	Karad Bold	616	637	474	460	—3.3	30.0	33.9
	Kanpur	Average	775-825	750–800	530-550	300-550	3.2	48.1	83.2
	Rajkot	Average	537.5	541.67	370	433.33	—0.8	45.3	24.0
(2) Groundnut oil ..	Bombay	—	1,456	1,570.4	1,040	1,060	—7.3	40.0	37.4
	Madras	—	1,380	1,460	1,040	1,015	—5.5	32.7	36.0
	Rajkot	—	1,412.5	1,472.5	930	1,080	—4.1	51.9	30 8
V. Others									
(1) Sugar	Bombay	C-30	559-570	645–650	825–840	289–300	—12.8	—32.2	91.7
	Hapur	—	550-590	580–620	800-825	292–300	—5.0	—29.8	92.6
(2) Khandsari	Hapur	Superior	400–480	480–540	480–540	265–275	—13.7	—13.7	63 0
	Delhi	Deshi	640-660	640–660	520–580	270–288	—	18.2	133.0
(3) Gur	Hapur	Dhaia Sup.	265-280	282–290	375	195-200	—4.7	—27.3	38.0
(4) Tea	Bombay	Average	2,300	2,300	2,400	2,250	—	—4.2	2.2

subject to export obligation to be discharged by March 31, 1982. The Centre also decided to waive the import duty on this cotton.

The enquiries up to August-end were only for 50,000 bales of which the National Textile Corporation (NTC) accounted for 40,000 bales as against 10,000 bales by the private sector mills.

The Union Government authorised the export of 75,000 bales of long and extra-long staple cotton. The CCI and the Maharashtra State Cooperative Marketing Federation were allocated 25,000 bales each while 20,000 bales were allocated to the Gujarat State Cooperative Cotton Marketing Federation. The balance 5,000 bales was yet to be allocated.

The Agricultural Prices Commission revised upwards its earlier recommended support price of kapas from Rs 375 to Rs 380 per quintal for Fair Average Quality (FAQ) grade of 320 F Punjab American variety.

The price of cotton (Bengal deshi) in the Bombay market rose by 2.6 per cent during the month to Rs 1097 per quintal.

Edible oils

The Union Government raised the allocation of imported edible oils to the vanaspati industry by 30 per cent during the festival months to tide over the peak demand. In all 30,000 tonnes of imported edible oils were expected to be released in addition to the monthly allocation of 50,000 tonnes to the vanaspati industry during September and October.

The Lok Sabha approved the Customs Tariff (Amendment) Bill raising the basic customs duty on imported vegetable oils and allied products to 200 per cent from the earlier level of 40 per cent. The effective rate of duty was, however, fixed at 150 per cent by a notification.

The Planning Commission asked the States to intensify their programme for monitoring oilseeds production by initiating a three-tier system of review—first by the Chief Minister once in six months, next by the Agriculture Minister at district level periodically and finally regular monitoring by the Agricultural Production Commission and Director of Agriculture.

Edible oils imports during the period November 1980 to July 1981 amounted to 7.52 lakh tonnes. Nearly 1.54 lakh tonnes of imported edible oils were expected to be received duriny August.

The Centre assured the four southern states — Andhra Pradesh, Karnataka, Kerala, Tamil Nadu — and the Union Territory of Pondicherry an increase in the monthly allocation of imported edible oils for the period August-October 1981.

Keeping in view the festival season demand the Centre decided to supply an additional two lakh tonnes of imported edible oils for distribution through fair price shops.

The Agricultural Prices Commission revised upwards its earlier recommended price for groundnut-in-shall from Rs 270 to Rs 273 per quintal, soyabean (black) from Rs 210 to Rs 213 per quintal, soyabean (yellow) from Rs 230 to Rs 234 per quintal and sunpower seed from Rs 250 to Rs 253 per quintal.

In the Bombay market the price of groundnut (Karad bold) declined by 3.3 per cent during the month to Rs 616 per quintal.

Sugar

Sugar production in July, the tenth month of the current season (October 1980 to September 1981) was 19,000 tonnes as against 17,000 tonnes during the same month last year. The total production in the first ten months touched 50.67 lakh tonnes as against 38.22 lakh tonnes during the corresponding period last year. Despatches during July were 4.59 lakh tonnes for internal consumption and nil for export as against 3.58 lakn tonnes for internal consumption and nil for export in July 1980. The total offtake in the first ten months was 39.47 lakh tonnes for internal consumption and 60,000 tonnes for export as against 44.44 lakh tonnes for internal consumption and 2.30 lakh tonnes for export during the same period last year.

The total closing stock of sugar with the factories as on July 31, 1981 was about 16.55 lakh tonnes as against 12.34 lakh tonnes on the same date last year.

The Union Government reduced the tariff value of free sale sugar by Rs 40 to Rs 550 per quintal for September 1981.

According to official sources, during the new sugar season commencing on October 1, 1981 sugarcane crop was estimated to be 180 million tonnes while sugar production was estimated in the range of 65 to 67 lakh tonnes.

The Centre released 4.96 lakh tonnes of sugar for internal consumption for September—55,000 tonnes more than the quota for August. This included 2.71 lakh tonnes of levy sugar and 2.25 lakh tonnes of free sale sugar (including 25,000 tonnes of imported sugar). Three ships with about 30,000 tonnes of imported sugar had arrived in the country so far. The total imported sugar cost was estimated at Rs 100 crores.

In its revised recommendations, the Agricultural Prices Commission did not suggest any change in the procurement price of Rs 15.50 per quintal recommended by it earlier for sugarcane for the 1981-82 season.

In the Bombay market the price of sugar (C-30) declined by 12.8 per cent during the month to Rs 559-570 per quintal.

Rubber

During 1981-82, a quantum of 28,150 tonnes of natural rubber was proposed to be imported by the State Trading Corporation (STC). Imports would be inevitable as demand for natural rubber at 1.85 lakh tonnes was expected to be higher than the estimated production of 1.65 lakh tonnes. The country's stock of rubber at the end of July 1981 was estimated at about 30,000 tonnes which was only two months' requirement against the minimum three months' inventory stipulated by the Government.

The Union Government decided to exempt from customs duty an additional quantity of rubber imported by the STC. The duty exemption order was likely to cover about 25,000 tonnes of rubber.

Tea

The Union Minister for Commerce stated on August 25 that the Centre had no intention of nationalising the tea industry or even the trade in it. The tea industry was awaiting the announcement of a package of relief measures to lift the industry out of the morass. These measures were included in the recommendations of the two-day meeting of tea interests as well as representatives of Central and State Governments held at New Delhi on August 3 and 4. Some of the recommendations were:

(i) The excise duty on tea should be reduced, (ii) the West Bengal rural employment cess should be waived on all export sales of tea, (iii) excise duty on packet tea should be substantially reduced or totally removed, (iv) agricultural income tax, sales tax and other local taxes should be adequately cut and (v) indirect taxes paid on exports should be refunded through a simple draw back procedure.

During the period April-June 1981, actual shipment of tea from the country went up by 11.27 million kg to 46.74 million kg but the unit value fell by Rs 1.72 per kg.

The price of tea in the Bombay market ruled steady at Rs 2,300 per quintal during the month.

Coffee

The Union Government reimposed the export duty on coffee at the rate of Rs 75 per quintal with effect from August 21, 1981. This was done in view of the increase in the international prices of the commodity.

New directions in packaging

—A FEATURE

Packaging revolution: The tasks ahead

By P. K. DAS GUPTA

THE last decade had witnessed considerable changes in the distribution and marketing of industrial products. Today there are indications of change connected with the farm sector in those areas. Either, these changes have influenced corresponding changes in the packaging scene or the developments in packaging have contributed to such changes. No doubt, the packaging material manufacturing and conversion industry has been able to meet the challenges. Yet, considerable room exists for promoting the standards of packaging, using Indian materials and systems, in the face of severe cost escalations arising from the energy crisis being witnessed from the mid-seventies or for exploration of new areas of growth for expanding the packaging industries' sphere of activity.

The next decade is likely to see a number of new dimensions being added to the role of packaging in the country. With new materials being added and the compulsions of cost reduction becoming even greater, there are as many problems as there are newer opportunities for the packaging industries to grow.

Some of the more important tasks that face the packaging material supplier and the packer today relate to the adoption of a code of conduct for packaging of goods, the protection of consumer, resource conservation, packaging for exports, etc. The opportunities lie in the non-traditional areas where packaging industry has been observed to be hesitant to penetrate perishable areas such as vegetables, fruits, flowers and food production.

Code of conduct

Despite the spectacular expansion of the packaging industry the standards of packaging in the country continue to be poor. This situation is almost always blamed on the package conversion industry. A closer scrutiny of the situation would, however, reveal that the responsibility for this state of affairs rests equally with the package users in the organised sector of the industry. It should be realised that after all the package manufacturer can only meet the need as stated by the buyer — the packer — at a price. The responsibility for adoption of non-standard or improper quality, even when better materials are available, is an avoidable situation. The material control and marketing personnel connected with taking decisions on packaging in industry would do well to examine the causes for this malady. The organised industry can set the trend in innovation, standardisation, and variety reduction so that the rest of the community can follow in their footsteps. No doubt they need the cooperation of the primary material producers and package makers in this effort. But the packers must adopt a code for better packaging of goods, and implement it sincerely. Otherwise, the packaging industry will not have the necessary motivation to achieve greater excellence.

Consumer protection

The consumer in India today suffers due to a number of wrong notions in industry and trade about packaging. Goods that are required for his basic needs are not packaged on the wrong premise that packaging adds to cost. But ultimately it is he who pays for the losses and damages in transit due to the absence or inadequacy of packaging. Secondly, because he is forced to buy the bulk of his needs in loose, there is no guarantee that he receives the right quantities, despite his already being overcharged to compensate for the losses in transit for which he was not responsible. So, even for quantity he has no guarantee. Thirdly, because of the absence of brand or source identity in essential goods he has no guarantee of the quality of the goods as well. The entire thinking connected with protection of consumer has to undergo a radical change if the consumer were to benefit in real terms. No doubt the Packaged Commodities Order is a good beginning where the packaging

Mr P. K. Das Gupta

consciousness is already in existence. The scope of this order may have to be enlarged to make packaging mandatory, once it is established that consumer's interests will be safeguarded through such a measure.

Export packaging

While the packaging industry has certainly grown by leaps and bounds and is now in a fairly higher technological level, one does witness imports of packaging materials on a massive scale for export needs. The import policy for registered exporters lists instances where packaging materials and packages are permitted to be imported. Currently, the country is committed to exporting large quantities of consumer goods to the USSR, and it is common knowledge that packages for the products are being imported for the purpose. This situation is not quite desirable in the overall long-term interests of Indian exports. For, even as it is, due to the poor appreciation of the role played by packaging in the industry and trade, India's image in the rest of the world is at a low ebb. Imports of packaging mate-

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Mr Das Gupta is chairman of Indian Institute of Packaging and Tea Trading Corporation of India Ltd.

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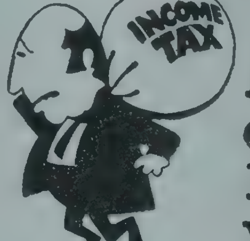

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INVESTMENT AVAILABILITY AGAINST TOTAL CAPITAL EMPLOYED:	70% to 90% FROM BANK OR FINANCIAL INSTITUTION.
COST OF RAW ... MATERIAL (app.):	Rs. 21,000/- per M.T. (app.)
PROFITABILITY	App. 20%-25%
PRODUCTION PER MONTH CAPACITY	Plant (a) 12 M. Tonne/month Plant (b) 25 M. Tonne/month Plant (c) 50 M. Tonne/month

RETURN OF INVESTMENT WITHIN 2 YEARS

Data received from Market Survey by a Consulting Company.

The above statement (as on May '80) is for your guidance only.
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rials would tend to further reinforce doubts about India's capability in the field.

On the one hand we have packages, designed and produced in India, that have won awards at international contests and at the same time we depend on imports even from countries which are much less industrially advanced than India. There is a need, therefore, for the exporters and the packaging industry to get together to discuss and sort out this thorny issue. Perhaps high costs resulting from high raw material cost or the systems of taxation are responsible. The remedy lies in identifying measures that will ensure that these causes are remedied so that Indian products can be exported in Indian packages. There is a need for export promotion councils in the country to enter into a dialogue with the packaging interests, may be, using the forum of the Packaging Institute where necessary.

Resource conservation

Studies undertaken recently by the Sivaraman Committee which went into the problem of eco-development of the Himalayan region has come out with certain startling revelations. In order to pack fruits in the Himalayan region for every one hectare of orchard about 10 hectares equivalent of timber is wiped out. This happens despite the availability of alternative materials. It is rarely realised that the kind of forest wealth that is being used for the purpose need not necessarily be used and that it deprives the paper industry of its raw material resource on the one hand and on the other the engineering industry which cannot but make use of timber based packages (because of the heavy loads involved) also suffers as it has to make do with less efficient materials leading to avoidable losses and damages in transit. The conservation of resources and the adoption of proper packaging *i.e.* eliminating of unwanted packaging from one side and putting the packaging material to the right use on the other, are areas in which every citizen of the country should be involved because his future resources are at stake. The packaging industry would, therefore, have to generate public opinion on the role of proper packaging in resource conservation and at the same time identify and promote proper usages.

While the above are areas which highlight the need for greater dialogue between the Government and trade as well as within the industries the opportunities in the context of the emerging technological society in the country, where packaging tends to be accepted as a part of life, are many and of significant importance.

Flowers : Today there is a new awareness of the potential for the export of flowers, particularly to the developed countries during the winter months. While there is enough room for undertaking work with regard to the types and species of flowers that are required to be marketed, there is a need for developmental work to be undertaken towards their packaging. Here the problem is not merely of packaging but also of simple techniques of preservation. The packaging technologies and the agricultural scientists would have to get together on this subject. Agricultural universities can undertake studies on the subject and the Institute of Packaging can help where packaging is involved. The vast potential that can be very easily tapped if one were to have a look at just the EEC market would bring home this aspect. The increasing gap between imports and exports, which is expected to widen further, can be plugged only when exports are promoted in the not too traditional areas such as flowers.

Vegetables : As in the case of fruits there is hardly any reliable statistics available with regard to vegetable production in the country. While every little information is available with regard to the movement into the markets in the urban areas in the country, the quantum of marketable production is not known. Here again the adoption of appropriate packaging techniques was given any serious consideration only when exports picked up in a big way with the opening of the Gulf markets in the latter half of the 1970s. Whatever packaging was adopted was product of the urban centres and no attempt was made to shift the productions scene to the rural India. An interesting opportunity given for rural industrialisation is still neglected. The product loss from the rural to the urban centres in age old packaging forms and norms is still being tolerated. Assuming that about 10 million tonnes of vegetables including potato, onion, tapioca, *etc* are moved to urban markets and 10 per cent in terms of weight will be the quantum of packaging consumption for the purpose, the trade as well as the packaging industry must get together to determine how best the profitability in this business can be improved further for the benefit of the farm sector and the consumer. The governmental measures necessary for the purpose must be identified and taken up with appropriate agencies.

Horticulture : The country's urban markets receive over two million tonnes of fruits every year. Even statistics concerning the marketable production are not available. Particularly those connected with the developments of the hill region in the country are only too well aware of the lack of adequate infrastructure for transport and distribution and the resultant inability to move large quantities of fruits to the markets from the production centres. Where transportation facilities are available, the loss in transit is estimated to be as high as 30 per cent. Even this figure does not include the value losses resulting from marginal damages that reduce the market price for the fruits in question.

Packaging of fruits and vegetables merely for the purposes of exports received attention in the beginning of the 1970s and there is some movement in this direction. But only a fraction of the total production is exported. This brings into focus the enormous amount of losses that can be prevented in this area which would help the farmer in upgrading his economic status. But as in the case of foodgrains no organised effort is discernible in the direction of packaging for the prosperity of the producer. And, horticulture offers huge potential as it is obvious from the fact that only the states of UP and Himachal Pradesh are producing even now about one million tonnes of apples and other fruits.

Foodgrains : Today the country is reaping the benefits of the green revolution and the agricultural production is of the order of 130 million tonnes and more a year. A substantial portion of this is being distributed throughout the country. While the popular belief is that 80 per cent is consumed nearer the production centres, for home consumption at the farm level, the actual movement involves much more than the balance of 20 per cent in order to meet the needs of the public distribution system and for sale through fair price outlets. Besides moisture loss which is minimisable, large quantities of foodgrains are lost during the distribution system due to inadequacies of transportation, storage and handling systems. A major part of this estimated loss of about 10 per cent is preventable if packaging is improved upon.

To reduce the overall cost to the consumer even within the country, it is essential that the farm sector is made to realise the necessity for improving the packaging techniques. Particularly in the context of the need for creating adequate buffer stocks there is a need to conserve more and this alone should provide necessary motivation for research in this direction.

Likewise, in the exports of foodgrains that are currently taking place, it is unfortunate that no consideration has been given to increasing the value realisation through packaged, graded and branded exports. Higher value realisation, using packaging as an important tool, is possible, and every opportunity must be taken to implement this concept.

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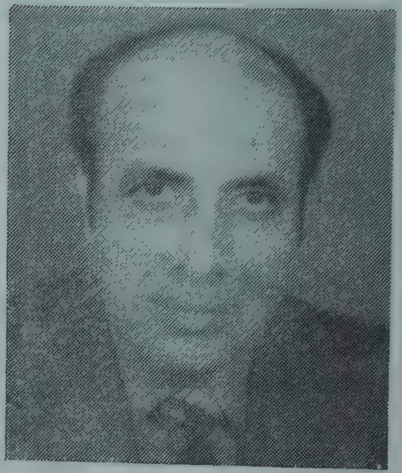
Packaging industry arrests national waste

By R. K. CHOWDHARY



Mr R. K. Chowdhary

IN the ear splitting clamour for arresting the rise in prices, controlling the import bill, maintenance of essential services, industrial relations, *etc*, plans, proposals and strategies to arrest national waste taking place in the Indian economy have not yet qualified to become one of the sensible choices. It is a great paradox that the scarcities of products and commodities are often accompanied by the abundance of wastages, spoilage and losses. No wonder that the scarcities become more acute and create a state of utter helplessness and frustration.

One way to act through the murk is to look beyond the sphere of production and visualise factors that cause physical depletion and deterioration of resources produced at a very high cost. It is the physical supply for industrial and consumer uses needed in far and distant pockets in varying and unpredictable conditions of rain and sunshine and at well regulated and economical prices, that assumes an important and highly relevant role. Proper, adequate and right packaging along with an improved distribution system will make a significant contribution to the conservation of resources and greatly enhance their time and space utilities.

Today, when new industrial units are being promoted, cross-breeds of high yielding commodities researched, new cultures of export being developed, the connections that would facilitate distribution and enable the fruits of production technologies to reach the consumption ends are unfortunately either being ignored or paid a lip service in the national context. It does little good to the reputation of Indian planners, farmers, businessmen, scientists, logistic experts, barons of industry and trade and the Government if goods worth Rs 3,700 crores to Rs 3,800 crores are lost annually due to the impact of climatic, mechanical or micro-biological hazards. Even with such a high incidence of losses — be it be for cement, chemicals, foodgrains, manufactured items, sugar, petroleum products, fresh vegetables and fruits, *etc*, there does not appear to be a significant turnabout in reversing this trend.

This has posed a paradox and is a contradiction to our economic goals — shaping our future growth on the technological patterns of the advanced countries in the West but shunning improvements called for in the transport and distribution facilities. Seemingly, such an imbalance in our emphasis and actions have compounded our mistakes, resulted in confused wisdom and created improper functioning of the life-line of the production system *viz* the system of distribution. The continued impoverishment of infrastructural facilities of transport and communication, health and education, irrigation and power generation, have combined to deprive a mass of people of the fruits of limited development, of which a disproportionately large segment is damaged or spoiled in the distribution system.

Unavoidable waste

Experience all over the world is a pointer to the fact that a vast majority of losses just do not occur by themselves. Their origin can be traced in one form or other to the human factors and failures such as lack of concern, skills, knowledge, application, integrity, efficiency, awareness, technology and proper use of existing facilities. Nearly 70 to 75 per cent of losses are avoidable and can be arrested through development of the right attitudes by people and the application of improved techniques and technology.

In our country, a situation exists where if one is to believe the official records, incidence of losses suffered by the products and manufactured items may even be less than those suffered in most developing countries. The credibility of such phenomena is evidently under the shadow of doubt particularly when analysed in the context of relatively much weaker infrastructural base accompanied by heavy and rough handling, inhospitable climate and more often indifferent concern for arresting losses.

Extent of losses and causes thereof

No authoritative data on the extent of distribution losses is available with a fair degree of reliability. Nor the totality of the claims preferred on insurance companies and transport agencies would, it is felt, portray the true picture of product/produce losses. According to well informed opinion, corroborated by conservative estimates of the official machinery, nearly a tenth of foodgrains produced in the country are lost every year. This coupled with a loss/damage of seven per cent of cement and chemicals; six to seven per cent of sugar; 8 to 10 per cent of fragile items; five per cent of paints and varnishes; five to seven per cent of electrical lamps and tubes; 25 to 30 per cent of fresh vegetables and fruits; 15 to 20 per cent of fish; 15 to 20 per cent of meat; 7 to 10 per cent of eggs; 13 per cent of readymade garments, salt, spices, tea, etc add up to a gigantic figure.

The demands of economic sanity do not call for summary dismissal of these losses on the grounds of their being normal in the distribution system. It is difficult to comment how far a particular cause is responsible for damaging a product. For instance, a tiny puncture in a multiwalled paper bag or a sack containing powdered edible products or rice can be an invitation to rodents, insects, which over a period of time, may render these completely unfit for consumption. An accidental bruise in a general and valuable cargo, like a hi-fi sound system, transistors, automobile spare parts, cigarettes, alcoholic drinks, clocks and watches, garments and other goods may not go unnoticed by the unscrupulous elements and tempt them to pilfer the cargo. Further, a slight damage in packing conditions may make photographic film unfit for use due to the hazard of light and dust. Bruises suffered by soft-skinned fruits due to their interaction with rough and hard surfaces of baskets, wooden boxes etc may change their quality and grade and reduce the rate of unit realisation. Absence of insulation, rise in temperature in closed wagons often shuttled and stationed under the blazing heat of the sun may make the entire load of fresh fruits fully baked and unfit for sale. Woody smell in some consignment of tea, fungus infested leather products, soiled garments, moist salt, sugar, smelly spices, spoiled bread with printing ink marks, etc, are some of the illustrations that bring to light the phenomenon of premature aging, owing its sufferings to the onslaught of a hazard whose impact can

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Mr Chowdhary is chief executive, Packaging Companies, Jardine Henderson Limited, Calcutta.

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more often be controlled through proper packaging, handling, transportation and storage.

Total approach

The above inference goes to point out that any attempt on identification of causes of losses must take into account a totality of factors and seek solutions and suggestions that embody improvements in all the integral parts of the system. One is likely to be frustrated if an attempt is made in isolation to improve packaging specifications without a frontal attack on poor handling, transportation and storage. At the same time, it is considered that effecting improvements in the methods of handling, hardware of transportation and storage network, call for huge capital investments and have a very long gestation period. Should one wait for these improvements first to take place as a prelude to arrest losses, and thereby allow the orgy of losses to continue unabated? Evidently not!

Improvements in the field of packaging can broadly contain and reduce the incidences of losses inflicted on products on account of hazards of environment through which packages perform their journeys. The environment seldom remains static and is highly variable from country to country and region to region within the country. Packages are dropped from different heights, receive impact on different faces, edges, corners, experience fatigue due to vibratory motions in transit which varies with time and position in the vehicle. Handling equipment subject packages to compressive forces that vary in intensity and the way they are applied. Climatic conditions change during a journey and period of storage and tend to weaken the packages. These coupled with hazards arising on account of attacks by fungi, moulds, bacteria, insects, beetles, moths, flies, ants, termites, rodents, rats, etc wherever applicable, lead to product spoilage. Hazards created by men whose temptations find varying degrees of gratification through pilferage and substitution of products add a further and complex dimension to product losses. At the same time, the products suffer the hostility of other products either moving in the same vehicle or stored in the same place in proximity with each other. For instance, the products may get contaminated by the material of adjacent bags or may be spoiled by leaking the contents of packages containing liquids. These hazards are present in every country. However, their degree and intensity varies. Their ill effects can be greatly reduced by introducing improvements in packaging and related systems of distribution.

Lack of standardisation

In addition, there are even losses that occur due to lack of standardisation in packaging units, which is economically proving to be less productive by adversely affecting handling, storage and transportation of these packages. In the absence of standardised units, a wide range of packages varying in shapes and sizes, in design, methods and materials used for transportation, lead to the necessity of different methods of handling and storage.

Materials handling

One of the greatest single factors responsible for the loss or damage to the product is traceable to poor material handling. It is a matter of great concern and anxiety that very little attention has been or is being paid to such vital aspects. Handling habits are highly individualised in various regions, even then there are basic and minimum norms that need to be observed for protecting the products from the incidence of damage and disintegration. There is enough evidence to show, particularly in many parts of India, that the minimum standards laid down for safety of products are not observed, resulting in loss to life and damage to property.

Handling and storage of fragile products are different from the non-fragile ones. Similarly, handling and storage of liquids requires a different treatment than for solids. Handling by fork-lift trucks, cranes, electrical winches, conveyors, tow-tractors requires different skills and talents in the application of the equipment. Surprisingly, many of the damages suffered by the products have occurred even where every mechanical handling has been resorted to primarily due to deficiency in the operation of equipment and techniques of handling. Seldom do the workers realise that the products are delicate and they often respond to the temptations of lifting or stacking the products with sudden bumps and impact.

No matter whatever be the instruction conveyed regarding the fragility/delicacy of the products, safety of product in handling is seldom considered to be a feature falling within the purview of the handling agencies. The same scenario is reenacted during loading and unloading operations. Stacking of trucks to dangerous heights, filling of space with scant regard for load balancing, absence of concern for the excessive overloading, uncleaned vehicle and wagons, rough handling causing knocks and falls and inverting packages are some of the maladies of many handling operations which are familiar to most of us in the developing countries.

Change in attitude

Brooding over the past in the present is a natural preoccupation. While the validity of comparison is not questioned, it is accepted that such comparisons would prepare an individual, organisation or a country to seek improvement and overcome the problems of the past. Improving standards of packaging and initiating measures for prevention of product losses must commence with the change in attitudes towards the losses. The techniques and technology of packaging improvement would yield better results with a deep craving to effect a change in the attitude from a state of indifference to utmost concern to prevent losses. For this, all the partners in business have an equal responsibility, *i.e.* the producers, workers, package suppliers, handling agencies, hauliers, storage and warehousing personnel, track and road maintenance departments and the public authorities, all must combine their efforts to prevent losses.

To be wrapped in complex motivations of pursuing different goals, though good in isolation, may in the aggregate be reduced if an integrated approach is left out. For instance, the transport authorities seldom exercise a control on seggregating weak packages before these are loaded on to vehicles, wagons, ships or aircraft. Similarly, no handling agency worth the name, in practice, bestows differential care in handling weak packages and or fragile items. It would generally be prudent to conclude that a product/commodity, not well packed for its hazardous journey, from the point of production to the point of consumption, is very much on its own and must not expect any compassion and consideration at the hands of the handler.

Packaging development

There is perhaps no best packaging standard which is universally acceptable or applicable under all circumstances. Usually, packaging development is a step-by-step process. As investigational process proceeds, this will suggest useful modifications from the point of its usefulness in determining shelf life and ability to resist hazardous effects during journey and storage in the distribution system. Any unusual overemphasis on loss prevention in transit may make packaging very expensive and non-acceptable on grounds of economy. Similarly, any underemphasis on packaging may mean total loss of products or partial damage with a consequent reduction in its attributes and properties. A high concentration, by and large, either way may not provide the right answer. What is wanted is to work out a cost factor for packaging that on balance can result in much higher benefits than those con-

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To design a perfect package is not as easy as it appears. Many present day packages predominantly used in the country have many question marks related to their preservation and protection aspect. Seldom have we tried to direct our scientific pursuits to the existing modes and media of packaging. For instance, our traditional material like jute used predominantly for packaging of agricultural commodities and fertilisers, cement, cotton, textiles have not been subjected to scientific research.

From the foregoing, it is amply evident that a total approach to arrest product losses as a prerequisite for achieving results in this important and critical segment of our economy is crucially needed. It is also clear that the improvements called for in the system of transportation, handling and storage are not only capital intensive, but at the same time have a very long gestation period. It will be a herculian task to generate enough capital to meet the desired requirements for the improvements in the infrastructure sector. The point is where is this capital? Neither the capital in the right quantum is available nor in its absence we can afford to permit the orgy of losses to continue unabated. It will be an over statement to suggest that packaging improvements can provide all persuasive answers to the problems. Notwithstanding such an oversimplified approach, one concedes that adequate packaging can, to a considerable extent, minimise product and commodity losses.

It may be almost a foregone conclusion that effective packaging can prove to be highly result oriented in this direction. How and who would bring about effective packaging is a matter of paramount importance. Designing of the effective packaging cannot be left to the desires and whims of an inexperienced person. It seems quite logical to evaluate (i) packages used in various mores and modes of the distribution system; (ii) collect data on the frequency and intensity of hazards during journey and storage conditions; (iii) assess the relevance or otherwise of the packages; (iv) attempt modifications thereof which are duly tested in the laboratories and through simulated field trials, in the context of available indigenous material and skills in the country.

To attempt successfully and meet packaging modifications and innovations with precision and clarity requires a high degree of relationship between the end users, package suppliers, package developers and package researchers. Without such a firm relationship existing between the above there will continue to be many ups and downs in the efficacy and efficiency of packaging standards in India.

Just as the products have to be provided with more exact and standard methods of production and quality, they also need more precise and exact standards of packaging, without which the ultimate purpose of production to reach the right consumer, at the right place, at right time, in right form and quantities and at the right price would be defeated. The development of the agricultural and industrial landscape in India, needs an utmost co-ordination between the protection and production strategies. One without the other will be economically ill-conceived, socially unjust, commercially imprudent and politically confusing. The indifferent and contradictory handling by many authorities in the seat of power bears enough testimony to the fact that they are not aware of the losses taking place nor do they appreciate the role of packaging in partially remedying the situation. It is high time that the campaign to educate the authorities and adopt immediate measures to protect what is produced were launched with vigour and enthusiasm backed by real resources for research and development in packaging.

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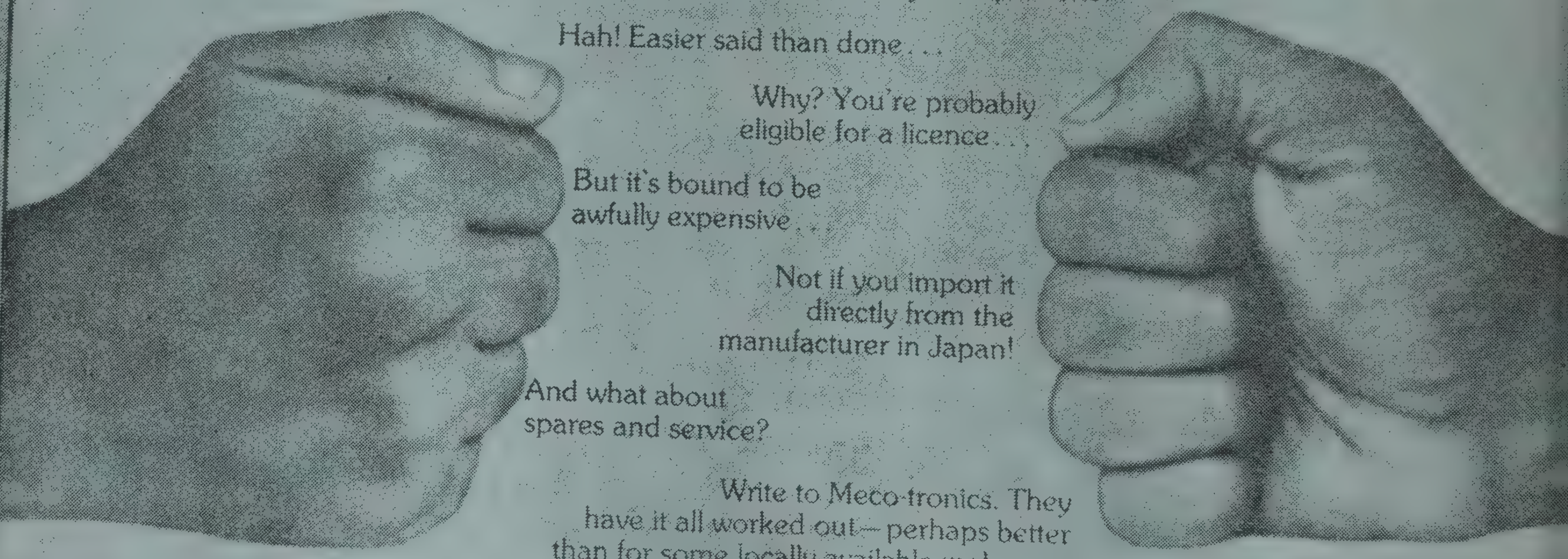

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COMMERCE

Vol. 143 No. 3667 Bombay, Sept. 26, 1981

UP STATE CORPORATIONS

– A FEATURE

Uptron's approach to development of electronics

By K. BHUSHAN

IN pursuit of rapid development of electronics industry in the State, Uptron has conceived following three approaches:—

(a) For building up infrastructure through a number of electronics estates and complexes whereby small and medium scale entrepreneurs could set up manufacturing units.

(b) Setting up joint sector units where medium and large investments are involved.

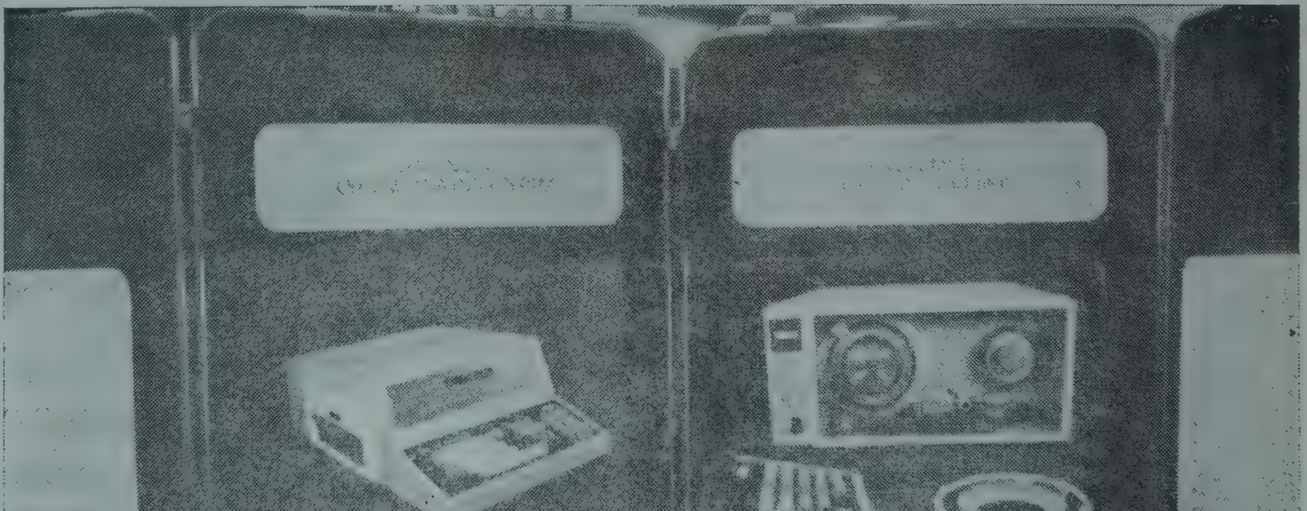
(c) Setting up large public sector units so that these serve as nucleus of growth. To operate such units efficiently so that these can generate surpluses and to use these surpluses for further growth of business activity.

Implementation of strategy

Large number of entrepreneurs are having profitable ventures in Uptron complexes at Kanpur, Rae Bareli, Sahibabad, NOIDA, Bhimtal and Sarojini Nagar, Lucknow. These entrepreneurs get help through multiple assistance plan of Uptron. New entrepreneurs are helped in product identification, preparation of project reports and project profiles through Uptron's consultancy department. Infrastructure Department of the company helps entrepreneurs in liaison with the government departments, assisting them in securing licences and arranging finances through financial institutions. The Testing and Development Centre helps to test the products at very nominal rates and if the product could be manufactured to specified quality the Marketing Division helps to market the products manufactured by such entrepreneurs.

Uptron has established a number of joint sector companies, *viz*, Hindustan Computers Limited, Uptron Electronic Devices Limited, Uptron Anand Limited, Uptron Shreetronix Limited and Uptron Powertronics Limited in the large scale sector. These companies manufacture several products ranging from high reliability polystyrene and electrolytic capacitors to sophisticated computer systems.

In addition to all these promotional activities in which Uptron participates actively, major strength of the company lies in its own successful commercial operations. The company manufactures in its own plants a very wide spectrum of products ranging from electronic components to highly sophisticated digital systems. In its factories at Allahabad and Lucknow the company produces economy and delux models of TV sets, community radio receivers, aluminium electrolytic capacitors, data entry systems, scientific computers, ground water well loggers, data acquisition systems. At its factory at Sahibabad the company produces industrial electronics equipment and systems. The products manufactured in its own factories generate a turnover exceeding Rs 1.2 crores per month. The group turnover this year is likely to exceed Rs 22 crores.



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Mr Bhushan is the executive director of Uptron.

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Uptron name synonymous with quality

Whatever products have been introduced in the market by Uptron, are considered of very good quality. In the area of consumer electronics, Uptron television sets are brand leader in the Northern Indian and Western Indian markets. The company will shortly introduce Uptron TV in Eastern and Southern Indian markets.

In the area of digital systems not only has company introduced standard products like data entry terminals but has also successfully commissioned airline reservation terminals all over the country. Today Uptron equipment serves Air India network at Bombay, Calcutta, Delhi, Madras, Bangalore and Trivandrum. In other places the installation work is in progress. A sizable number of custom-built data acquisition systems have been supplied to various state electricity boards during the last one year.

Groundwater well loggers, which have been manufactured for the first time indigenously, have been supplied to several states for their ground water exploration. These have resulted in saving of considerable foreign exchange to the country.

Uptron has entered into export market by commencing export of electrolytic capacitors in January this year. Since then there has been steady flow of export orders which are being executed. The company already holds export orders of 3 million pieces and expects to export at least 5 million pieces during the current year.

Uptron—Cost effective institution

The greatest strength of Uptron is in fact through its successful commercial operations. Though the company spends a very large amount on promotional activities, still it generates substantial surplus as a result of well planned and executed commercial programmes. Just like any other successful business enterprise it is doing so by functioning as a cost effective institution. There is accountability built-in at all levels. Targets and programmes must be achieved which are well monitored and control systems have been designed accordingly.

Research and development

Uptron's stress on research and development and its policy of encouraging innovation in all its activities has been highly productive. Today, most of the production and sales is through in-house developed products.

Each plant carries out its own research and development to improve existing products and to develop new ones The corporate planning division at head office controls and coordinates the overall effort.

Uptron—Strength through its personnel

Uptron holds its success and achievement through technical competence and spirit of dedication of its employees. Uptron has a kind of faith which unites and evolves from objectives and interests common to all its employees and prevails at all levels. It is a kind of faith which welds Uptron into a family which is assuredly realistic.

From its modest success Uptron strives to become a dynamic and large institution, conscious of its obligations to its owners, its employees and above all customers.

PICUP paves path to prosperity

Concluded from page v

with an investment of Rs 50 crores is also proposed to be set up by PICUP in State joint sector.

The State Government has entrusted to PICUP the task of establishing a tool room project in the State to provide facilities for manufacture of jigs and dies required by industries and also to provide training in tool making. The construction work on this project at Lucknow is expected to be completed by December 1981 and the tool room is likely to be operational by early 1982. Assistance in the form of capital equipment from the Federal Republic of Germany is also expected for the tool room project.

To provide industrial information service to entrepreneurs, PICUP has established a well developed data bank for the storage of industrial information in an organised manner and to provide the retrieval services to entrepreneurs and industries in the State. The data bank maintains classified information on different aspects of industry and provides latest information to the officers of PICUP to enable them to guide the entrepreneurs. The data bank also maintains project profiles and feasibility reports on a shelf of projects.

In pursuant of its multidimensional role, PICUP has sponsored the Institute of Management Development, at Lucknow, Uttar Pradesh, to fulfil the needs of industry in general and public sector enterprises in particular in the field of management development and to provide training in modern management techniques to executives of State enterprises, officers of the State Government and entrepreneurs. Courses on various facets of management are regularly conducted by the Institute of Management Development, Uttar Pradesh.

PICUP, the nodal agency for industrial development, thus is poised to welcome industrialists and entrepreneurs to participate in the progress of Uttar Pradesh.

UP Financial Corporation

Concluded from page viii

these factors and as such the Corporation is trying to emerge out as a very vital organisation for the industrial development of the State. The Corporation is planning to disburse loans for more than Rs 200 crores during the plan period.

The Corporation is embarking upon an ambitious programme for the year 1981-82. The business plan of the Corporation is going to be finalised with the approval of the IDBI. Tentatively, the Corporation intends to sanction loans during the year 1981-82 for Rs 45 crores and also disburse loans for Rs 30 crores. During the year 1981-82 the Corporation is also planning to take up rehabilitation of sick units in a big way. If possible, the Corporation will also take over certain sick units and run them through its own arrangement. The Corporation will concentrate on further simplification and rationalisation of its rules and procedures governing the sanction and disbursement of loans. Better systems for follow-up and diagnosing the difficulties of the units at various stages will be introduced. The Corporation will also organise a number of entrepreneurial development programmes and also organise seminars and meetings to educate prospective entrepreneurs about availing of financial assistance from the Corporation to set up new industries.

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INDUSTRIAL ASSISTANCE HAS NEVER BEEN THIS FAST.

YOUR IDEAS START TAKING SHAPE THE MOMENT YOU TELL **UDYOG BANDHU** ABOUT THEM

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Hundreds of Techno-economic Feasibility reports are already with us. Any new report can be prepared within a couple of months, and technology, land, power and finance tied up and arranged.

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Also giving you the largest packet of incentives in the Country—A gift of Rs.90 lakhs for a project. Additionally the requirements of equity, underwriting assistance and term loan fully met/tied by PICUP.

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PICUP, UPSIDC, UPSEB, DI & UPFC HAVE JOINED HANDS TO GIVE YOU A HELPING HAND KNOWN AS **UDYOG BANDHU**

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RAMA

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PICUP paves path to prosperity

By S. C. TRIPATHI

THE Pradeshiya Industrial & Investment Corporation of Uttar Pradesh Limited, widely known by its acronym PICUP, was incorporated as a State Government company in 1972 and as a multi-dimension promotional agency and State level financial institution. In a short span of less than a decade, PICUP has opened up Uttar Pradesh to entrepreneurs and industrialists. Financial assistance of over Rs 47 crores has been sanctioned to 167 large and medium scale industrial units involving total investment of about Rs 355 crores with an employment potential of about 50,000 in the manufacturing and over 1,50,000 in the tertiary sectors respectively.

The three dimensional activities of PICUP encompass: (i) Promotional and technical assistance; (ii) Financial assistance; and (iii) Package of incentives.

The promotional and technical assistance rendered by PICUP helps entrepreneurs transform their ideas into reality. The consultancy wing of this corporation helps entrepreneurs in product/project identification, provides locational guidance, assistance in preparation of techno-economic feasibility report and allotment of land in developed industrial areas in the State. Assistance in allotment of steel and cement by Central and State agencies is provided. PICUP also assists entrepreneurs in sanction and release of power.

PICUP has identified 250 medium and large projects for setting up in the State during the Sixth Plan. The investments required for these projects vary from Rs 25 lakhs to Rs 500 crores. Among the larger projects identified are four gas-based fertiliser factories, one aromatic complex, one large petrochemical complex based on higher fractions of gases coming from Bombay High and South Bassein, project for utilisation of Off FCC Gases of Mathura Refinery, polyester fibre project, nylon filament yarn project, caprolactum and DMT project, caustic soda, sulphuric acid and PVC project, ethylene glycol, venyl acetate monomer, 2 ethyl hexanol, calcium carbide and cement projects, paper projects, drugs and pharmaceutical projects, alcohol and pesticide projects, synthetic spinning mills, process houses, high duty transformers, and insulators, power cables, switchgears, manufacture of electronic components etc. Project profiles and detailed techno-economic feasibility reports for most of these projects are either available or under preparation. On behalf of UP Government, PICUP is liaisoning with concerned ministries and public sector organisations of Government of India for setting up the larger projects especially in the field of petrochemicals and fertilisers.

According to a recent decision of UP Government, PICUP is acting as the Secretariat for High Power Committee presided over by Chief Secretary for large and medium sector industries in the State. All concerned departments of UP Government are represented in this committee where the issues are put up after processing of the case by PICUP for a final decision.

As a financial institution, PICUP extends assistance in the form of term loans, equity participation, underwriting and seed capital assistance. For term loans, liberal norms for security margin, equity, debt ratio and promoters' contribution are stipulated keeping in view the location, priority of industry and these norms are suitably relaxed for technical entrepreneurs and non-resident Indians. PICUP also participates with other Central and State financial institutions and commercial banks in extending term loans for medium and large scale industries in Uttar Pradesh. PICUP provides special assistance for underwriting and private placement is also considered. Gap in promoters' contribution for units with an investment up to Rs 100 lakhs set up by new entrepreneurs is covered under the seed capital assistance schemes of IDBI operated by PICUP.

The third dimension assistance by PICUP is in the form of an attractive package of incentives. Fifteen per cent Central Investment Subsidy in Rae Bareli, Faizabad, Lalitpur, Ballia, Basti, Almora and Jhansi districts of the State is extended to medium and large scale industries through PICUP.

Seventy five per cent cost for the preparation of the techno-economic feasibility reports is subsidised under the State Government scheme operated by PICUP.

PICUP also operates the interest free Sales Tax Loan Scheme under which the sales tax paid by new units in the first five years of production in backward areas and three years in other areas is given back as interest-free loan to be repaid in five and three annual instalments after a moratorium of 12 and 10 years respectively. This incentive is also available to existing units going in for substantial expansion. An interest free long term investment loan of up to Rs 25 lakhs is given to units operating outside UP if they set up a wholly owned or 51 per cent owned units in UP.

PICUP provides a special package of incentives for non-resident Indians setting up units in Uttar Pradesh.

An electrical complex located in Rae Bareli has been promoted by PICUP. Ten units manufacturing transformers, HT insulators, transmission line towers, conductors etc to meet the ever increasing requirement of the State Electricity Board set up in the electrical complex are going into production. PICUP is also promoting an Electrical Test & Development Centre to provide testing facilities for high tension transmission line towers, transformers and switchgears. This would be third such facility in the country and the first one in this part of the country.

Besides providing assistance to entrepreneurs, PICUP is participating in industrial growth of the State by setting up joint-sector ventures in specialised industries. Joint-sector project with non-resident Indians for the manufacture of fiberglass by the name of "UP Twiga Fiberglass" has commenced production. This is the second unit for production of fiberglass in the country which has a wide range of application and a number of units utilising fiberglass as the main raw-material are likely to come up. Uttar Pradesh Drugs & Pharmaceuticals Company Limited at Lucknow, PICUP's joint-sector project with Indian Drugs & Pharmaceuticals Limited, for production of basic drug formulations has also gone into production. The Electrical Test & Development Centre, to provide primary testing facilites to units engaged in the manufacture of electrical instruments involving an investment of Rs 522 lakhs is in an advanced stage of planning. A joint-sector project for XLPE and PVC cables involving an investment of Rs 16.55 crores will be established in joint sector with Industrial Cables India Ltd, Rajpura (Punjab), in Mathura, a backward district of the State. Besides these projects, the prestigeous polyester fibre project

Continued on page iii

Mr Tripathi is managing director of PICUP.

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MANAGING DIRECTOR

UP FINANCIAL CORPORATION

Progress and targets

THE performance recorded by the UP Financial Corporation in various areas of its activities during the year 1980-81 has been a landmark in the history of the Corporation. In view of the rejuvenated industrial climate created in the State, the Corporation fixed unprecedentedly high targets for the year 1980-81, and in its record performance the Corporation not only achieved the targets but also exceeded them to the surprise of all concerned. With the alround progress achieved by the Corporation both in quantitative and qualitative terms, the Corporation has now achieved a pride of place in the comity of Corporations in general and amongst state financial corporations in the country in particular. The UPFC has achieved highest growth rate during 1980-81 as compared to other SFCs in the country.

Performance

The performance of the Corporation in the main fields of its activities, i.e. sanction, disbursement and recovery, during the last three years has been as given in Table 1.

From Table 1, it will be clear that the Corporation has witnessed phenomenal growth in all fields of its activity during the last two years and particularly during the year 1980-81. The Corporation sanctioned majority of the loans in less than three months' time. All assistance was rendered to the entrepreneurs in selection of a proper item of industry and availing of financial assistance from the Corporation at all stages. In the field of disbursement of loans which can be called the core activity of the Corporation, the Corporation recorded a growth of 60 per cent during the year 1980-81. The gap between sanction of loans and their disbursement has greatly reduced now. Even in the difficult area of recovery the Corporation could achieve a growth of 60 per cent over the previous year, despite many odds experienced by the units in their profitable working as well as by the Corporation in realisation of the dues.

Considering the size of the State and the organisational limitations, the performance recorded by the Corporation compares well with the achievements made by other SFCs. In the area of sanction of loans, our Corporation is bracketed with the leading state financial corporations of the Country, namely, Maharashtra, Gujarat and Andhra Pradesh Financial Corporations but which are operating in comparatively much more improved industrial climate. Similar is the position with regard to the disbursement of loans. Operating under many constraints, like the scarcity of essential inputs such as building materials, coal, oil and power etc, which continued impending the pace of desired industrial growth of the State, the State Government achieved a breakthrough in ushering in a satisfactory climate for industrial investment. The State could also overcome the adverse impact of severe drought faced by it during 1979-80. Further the Industrial Policy announced by the Government of India and the priorities spelt out in the Sixth Five Year Plan, have put at rest various uncertainties and have also created new hopes. All these are contributing to build up a favourable industrial climate in the State. This has obviously helped the Corporation to achieve its goals.

Objectives and strategy

Identifying itself with the objectives set forth in the Sixth Five Year Plan, which accords pointed priorities for the development of industry in the small scale sector, promoting industries having employment potential, rehabilitation of sick units where investments have already been made and also to offer more liberal concessions for the industries being promoted by persons belonging to Scheduled Castes/Tribes, the Corporation during the year 1980-81 introduced certain new schemes and also took measures to rationalise its systems, norms and procedures for dispensing financial assistance. The new measures taken in this regard include decentralisation of functions and delegation of powers to the regional offices, opening of new regional offices, relaxation and simplification in terms and conditions of sanction and disbursement of loans. With the mission to extend service to the entrepreneurs at the nearest point, the Corporation is now operating in the State with 14 regional offices and two branch offices, with at least one regional office in each division of the State. The Corporation is proud of taking such bold lead in the delegation of powers to the functional units. Now the regional offices of the Corporation can sanction loans up to Rs 4 lakhs process loan applications up to Rs 10 lakhs and disburse loans for all amounts and take all follow-up action in regard to a unit.

New schemes

The new schemes as mentioned below, introduced or concentrated upon during the last year, have given a new dimension to the goals before the Corporation and its activities—(i) Composite loan scheme; (ii) Assistance to handloom weavers; (iii) Small road transport operators scheme; (iv) rehabilitation of sick-units; (v) Margin money loan for rural and semi-urban areas; (vi) As-

Table I : Performance of UP Financial Corporation

Items	Achievement 1978-79 Rs lakhs	Achievement 1979-80 Rs lakhs	Target 1980-81 Rs lakhs	Achievement 1980-81 Rs lakhs	Percentage Increase over last year
Sanction of loan	2,484.77	3,320.02	3,500.00	43.26	30
Disbursement of loan	1,088.60	1,668.18	2,400.00	2,500.10	50
Reoovery of dues	476.30	642.36	1,000.00	1,040.00	60

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sistance from special class of share capital of the Corporation. Brief details of these schemes are given below :—

The most significant aspect of the composite loan scheme introduced in the year 1979-80 is that under it the total credit requirements of a small unit including working capital up to the limit of Rs 25,000 without any margin are met by the loan sanctioned by the Corporation. With a tie-up with UP Handloom Corporation, the Corporation introduced a separate scheme for providing financial assistance to handloom weavers both for purchase of yarn and for aquisition of looms. The terms of this scheme have been made very simple.

The road transport scheme was re-introduced during the year 1980-81 after modification and necessary changes with an intent to promote self-employment and also to promote tourism in the State. The most significant aspect of the scheme is allowing special treatment to the entrepreneurs belonging to SC/ST classes and for the hill regions where the stipulated margin is 15 per cent as against 25 per cent for other categories of entrepreneurs.

In order to promote industries to be set up by the artisans and weaker sections of the society, the Corporation has created a special class of share capital. The scheme envisages providing soft term loan/equity participation up to Rs 2 lakhs or 20 per cent of cost of project whichever is less. The soft loan or equity is to carry a nominal interest/dividend at the rate of one per cent per annum only.

Under its rehabilitation scheme, the Corporation provides various facilities including sanction of additional loan, rephasing the repayment schedule and remission of compound interest liabilities in order to revive the sick units. It also maintains close coordination with other concerned departments of Government and the commercial banks in this regard.

Under the margin money loan scheme for rural and semi-urban areas, loan on soft terms is available to the units coming up in rural areas and towns having population less than 50,000 as per 1971 census. In order to promote employment opportunities including self-employment, the assistance is admissible where investment in plant and machinery does not exceed Rs 1 lakh and to the extent of 10 per cent of the total investment consisting of fixed capital investment, pre-operative expenses and 3 months working capital requirement of the unit or Rs 20,000 whichever is less. In the case of SC/ST class, the assistance will be 15 per cent of the total fixed capital investment.

In order to remove regional imbalances, the Corporation continued its policy of offering concessional assistance for promoting industries in the backward and hill regions. The concessions include reduced margin, longer gestation period and reduced rate of interest. Similar concessions are also available for technical entrepreneurs. In the case of industries being promoted by SC/ST the stipulated margin can be as low as only 5 per cent. Other concessions being offered to this class include ½ per cent rebate on normal rate of interest, applicability of backward area interest rate for the industries being promoted in non-backward areas also and payment of only 50 per cent of processing fee and legal fee.

Development programmes

Special facilities for backward areas : The developmental programmes for creating proper industrial climate in the State continued to form an integral part of the activities of the Corporation. Besides organising industrial seminars and compaigns at district level during the past two years, it organised during 1980-81 two special entrepreneurial development programmes at Agra and Haldwani. For the benefit of small entrepreneurs it is also preparing project profiles in respect of several industries. Through UPICO, it carried out several surveys about the prospect of certain industries like paper and paper products, cold storage, printing, Khandsari and PCC poles, etc.

Seminar on co-ordination

During 1980-81, the Corporation organised a highly representative and successful seminar on co-ordination between banks and term-lending institutions in the area of providing financial assistance to the entrepreneurs. The salient feature of this seminar was to provide adequate opportunity to the entrepreneurs also to put forth their practical problems which helped both the Corporation and the commercial banks to evolve effective mechanism with regard to the appraisal of loan applications, sanction of loans, disbursement of loans, sharing of security, recovery of dues and nursing of sick units.

Staff development

The Corporation has also been alive to the need to tone up the internal system and to train the operating officials in modern techniques, particularly in the appraisal of loans and follow-up. The matter was also taken up with the IDBI to provide necessary guidance. Several short-term training courses where organised by the internal staff to equip the officials with basic and advanced knowledge/techniques required for standard appraisal of loan proposals, legal documentation, disbursement of loans and follow-up.

Future programme

The recent emphasis of the Government on industrialisation efforts, the decision of the Government to set up a number of large scale projects in public sector in the State, to encourage industries in the private sector and to provide base for the growth of industries in the small and tiny sectors have thrown great challenges before the Corporation. The Corporation has to evolve new schemes for the benefit of economically weaker sections of society, generating employment opportunities and for accelerating faster economic growth by industrial production. The Corporate plan drawn by the Corporation for 1980-85 takes into consideration all

Continued on page iii

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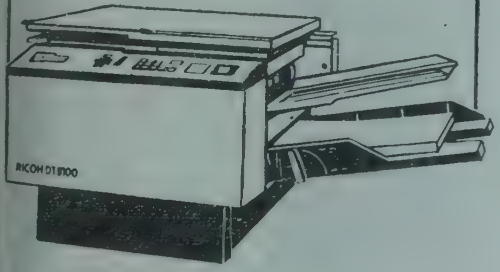

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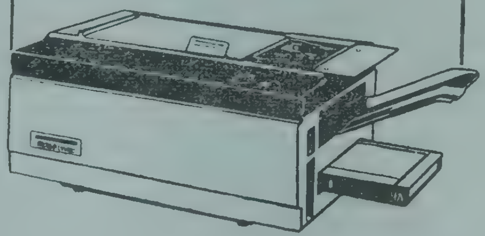

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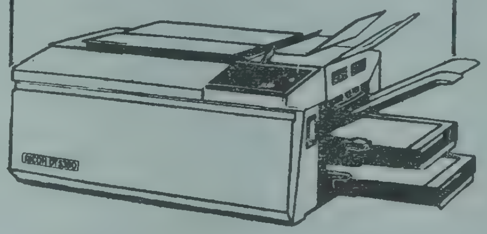

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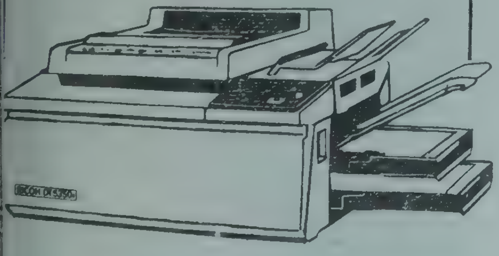

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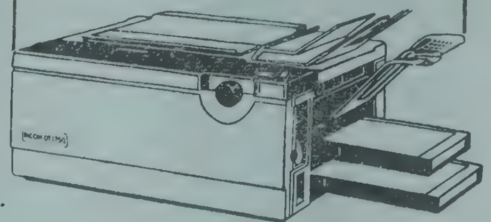

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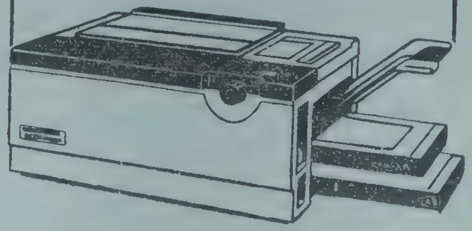

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Plastics for consumer packaging —users' problems

By K. C. R. RAJA

CONSUMER packaging currently absorbs approximately 60,000 tonnes of plastics raw materials a year, accounting for 34 per cent of total consumption of thermoplastics in the country. Plastic packages effect a retail sales turnover of Rs 2,100 crores a year and provide direct employment to approximately two lakh persons and sustenance to eight lakh persons besides generating substantial secondary employment in machinery manufacture, filling, transportation and distribution starting with ICI's LDPE plant at Rishra in 1959. Plastics made rapid strides in the sixties in both consumer and industrial packaging, singly as well as in combination with other materials. Interest in the medium was strengthened by the worldwide trend of declining plastics raw material prices — prices in 1965 were about one-third of the price level in 1950 — and hopes of a similar trend in India in the 1970's with a changeover to larger, petroleum-based units for raw material manufacture. Between 1965 and 1972, plastics did make notable inroads into the packaging of consumer items such as confectionery, vanaspati, talcum powder, motor oil, textiles and garments.

The 1970's, however, saw a distinct slowing down of development activity with the international oil crisis resulting in a rise of over 16 times in the price of crude oil between 1973 and 1980. Efforts to seek new outlets for plastics were dampened by price distortion and supply constraints. Between 1973/74 and 1979/80 plastics raw material prices rose by 240 per cent against an increase of 155 per cent in the official wholesale price index and an even lower 123 per cent rise in the price index for industrial raw materials. The price differential between plastics and other packaging materials underwent a change : tinplate prices recorded an increase of 215 per cent between 1973 and 1980 and glass of 220 per cent while the price of LDPE rose by 250 per cent and that of HDPE by 243 per cent. This was also reflected in a rise in the ratio of packaging cost to retail selling price which discouraged shifts to plastics.

Current scene

Despite these setbacks, plastics is today on the threshold of exciting changes. Availability of new materials like polypropylene, polyester film, nylon ABS, BOPP and milk film and of new processes like coextrusion, injection blow moulding, and stretch blow moulding have opened up new possibilities in several end uses. The versatility of plastics in terms of design and its cost reduction possibilities are being increasingly realised and these can be exploited to promote the package as an effective instrument of marketing. The major advantages are : (a) Light weight and, therefore, easy to store and handle. Plastics eliminate loss through breakage, unlike glass — an important consideration for products with high unit value. (b) Energy saving — energy consumption is lower for plastics; 100 one-litre PVC bottles consume energy equivalent to 8 kg oil compared to 23 kg oil for 100 one-litre glass bottles. (c) Can provide cheap, functional packs for the growing rural market, reducing the cost of physical distribution. (d) Freedom from corrosion. (e) Savings in outer packaging, with consequent saving of freight and insurance. (f) Saving in costs — engineering advances and development of newer materials have enabled convertors to reduce wall thickness and save material without a proportionate loss to performance characteristics.

Prospects

The Perspective Plan for Petrochemicals (1978-88) prepared by a panel of experts from raw material manufacturers, convertors and users has estimated a jump in demand for plastics packaging from 57,000 tonnes in 1977 to 1,49,800 tonnes in 1983 and 2,90,000 tonnes in 1988. The major assumption underlying this growth projection is freer availability of basic raw materials permitting a renewal of R & D and market development efforts. It has been reckoned that with the development of Bombay High/South Bassein regions and the use of Bombay High gas for ethylene and propylene, basic feedstock would not pose problems and that polymerisation capacity would keep pace with the growth of feedstock availability. If these materialise, convertors and consequently users should be able to operate in an era of freer supplies. The major directions of growth for plastics packaging, looking ahead for the next decade, would then be :

a) *Rural markets* : cheap functional packs, unit packs for essential items such as pharmaceuticals, detergents, coffee and milk with the twin objectives of achieving more effective distribution coverage and protecting the consumer against spurious goods.

b) *Prepackaging of produce*: an adjunct to the retailing revolution in the West. Prepackaging could either be packaging the produce in consumer size units at the producing centres prior to transporting them in bulk or packaging at the terminal markets — and could considerably reduce the spoilage of perishables (well over 30 per cent for fruits and vegetables) by extending their shelf life. The additional cost of packaging would be more than offset by the resultant social gain.

c) *Outer packaging* : represents an area of substantial cost reduction particularly with the prospect of material handling systems being adopted widely by consumer goods packagers. Shrink wrapping has made a modest beginning and could well take over a much wider range of consumer goods.

d) *Milk* : the success of 'Operation Flood' in augmenting milk supplies has highlighted the need for efficient distribution in convenience packs. Out of a total milk production of 12,000 million litres a year only 1,600 million litres are accounted for by the organised sector. Milk in sachets, though a recent development, represents 480 m litres or 30 per cent of the organised sectors production. Considering current efforts to extend the reach of this sector; plastics appear to have a major stake in milk marketing.

e) *New processes/materials* : such as thermoforming, stretch blow moulding, PET bottles for large size carbonated beverages would be of immense interest in the context of reducing packaging costs. These are, however, capital intensive and would call for substantial developmental effort in most cases outside small-scale limits of investment, both technological and financial.

Problems of users

It is worthwhile, at this point, considering the problems that users are likely to encounter in continued use/adoption of plastics. A brief study has highlighted the following :

a) *Material availability* : Flow of raw material and consequently of finished packages has been highly erratic because of production problems of raw material manufacturers and failure to plan imports in time. The converter has often oscillated between periods of glut and those of severe shortage.

b) *Consumer acceptance* : The functional and promotional advantage of plastics

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Mr Raja is commercial manager, The Metal Box Company of India Ltd, Bombay.

have not always been fully exploited. Size, shape and convenience features can considerably enhance consumer appeal particularly in end uses where strong inter brand competition exists. The packer is often handicapped by sufficient know-how to derive full advantage in this respect. Surface decoration potential of plastic packages has also not been fully exploited.

c) *Costs* : The user's total cost of packaging operations, rather than the package cost alone, can be controlled a great deal with provision of filling equipment to achieve faster output, value analysis to determine optimum package specifications and development of appropriate handling systems.

d) *Inadequate information:* Perhaps the biggest handicap is the 'information gap' relating to processing conditions and the possibility of extending usage to other applications.

e) *R & D* : Few packers have their own research and testing facilities to conduct product/pack compatibility tests; package convertors will need to augment this service, especially to their smaller customers.

Role of convertors

The converting industry consists of a large number of small and medium sized units spread all over the country. To sustain the growth momentum, convertors will have to devote themselves increasingly to the following :

a) Sophistication of design to achieve material savings and manufacturing economies.

b) Systems rather than the package : this entails a problem solving approach offering in combination with the package, the means whereby packaging efficiency can be improved and can only be attempted in conjunction with packaging machinery manufacturers.

c) For more sophisticated systems and new processes which involve substantial investment, the convertor will have to be adequately supported by a consistent and assured market — this would involve freer raw material availability and a more realistic excise duty policy by Government to stimulate production and consumption.

Role of raw material manufacturers

Raw material requirements need to be anticipated more accurately and steps taken to ensure timely supplies. A great deal of information needs to be disseminated on physical properties of different grades of materials. Equally necessary is dissemination of information on plans to manufacture new grades (e.g. PP copolymers PVC food grades) and on usage of these grades abroad.

Need for government support

Government has a special interest in plastics as it has emerged as one of the largest suppliers of both the feedstock and the plastic raw matrial and will account for an even higher share of output in the coming years.

As a supplier, Government needs to ensure timely import of raw materials in the short term and adequate capacity creation to take care of long term growth in demand. A Materials Bank could be of considerable help. A Central Information Pool could also keep raw material manufacturers, convertors and users abreast of international trends.

Government support to plastics packaging must, however, come mainly in two areas : price stability and market development. The former appears to be linked to rapid growth in domestic production of crude oil and the latter to encouragement of steps designed to achieve fairer distribution and protection of consumer interest in the vast unprotected markets for essential commodities, perpetually in short supply and sold loose regardless of health hazards, and risk of short weight. It has been estimated that consumers suffer a total loss of approximately Rs 1,600 crores a year on short weight alone. Government's recognition of consumer safety, is reflected in the Weights and Measures Act and the Packaged Commodities (Control) Order and these must be followed by equally effective steps to widen the scope of packaging in mass distribution of basic commodities.

Summing up—action points

a) *Material bank* : to guard against uncertainties in availability that would keep a tab on domestic production and ensure adequate imports.

b) *Price stability* : to enable plastics to compete on the strength of their inherent properties.

c) *Information* : to users on product/pack compatibility to help decide optimum package specifications.

d) *Selective Government support* : by way of a realistic excise policy to encourage low cost packaging.

e) Selective relaxation of licensing constraints where massive investment and R & D effort is required. Current small scale limits will discourage such investment.

f) Active pursuance by convertors of systems selling whereby the package is treated as part of a total system to improve packaging efficiency

g) Finally, the government support to increase the share of packaging in total output of packageable goods in the country bearing in mind the net addition made by packaging to national output in respect of critical, consumer products in perpetual short supply.

Plastics packaging has had a chequered growth in the seventies owing to unpredictable price trends and raw material constraints. The situation is likely to be very different in the eighties and given a reasonably favourable growth climate, freer material availability and concerted industry action should move convertors and users towards technological sophistication and sound market growth.

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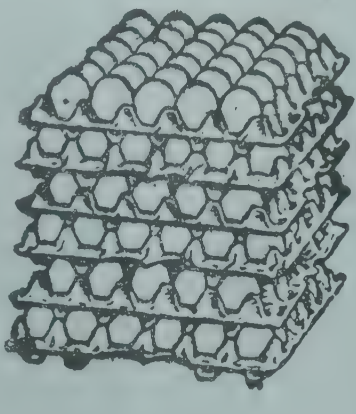

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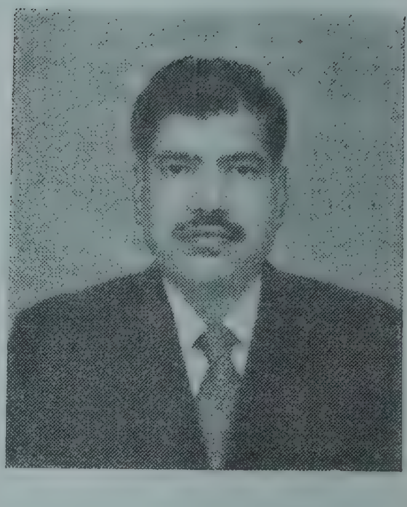
By K. SATYANARAYANA


Mr K. Satyanarayana

IN a society that produces foodstuffs and processed and manufactured articles in one locality and uses them in another, a wrapping or container is necessary during storage, transport and sale. Gone are the days when packaging was considered just as a medium to carry the product from place to another. Today it has acquired many more functions and a significant role in the commercial world. The functions of packaging are: 1. To contain a convenient sized unit or amount of a product. 2. To protect it in transit. 3. To aid its safe delivery to the ultimate consumer and 4. In some cases to display the product and promote its sale or to act as a dispenser of it.

Hence, packaging has today become an integral part of production, an essential part of physical distribution and a handy tool for marketing. As such, the packaging industry which was originally instituted to produce simple containers has expanded to encompass a variety of demands of packaging 'matter' in its various forms—gas, liquid solid; eg. cooking gas and Co_2 gas, milk and drinks, chemicals and fertilisers, domestic appliances and heavy industrial components.

Just as its functions and area of operation have magnified over the centuries, so also developments took place in packaging materials. Early transport containers for water, wines and oils like gourds, hollow tree stems and animal skins have yielded ground to new entrants. As Tennyson put it 'the old order changeth yielding place to the new' stronger containers like glass and pottery jars came into vogue later on. Glass bottles and pottery jars were superseded by wooden barrels which were more sturdy and could be made in larger sizes. Wooden boxes and slated crates remain unsurpassed for packing heavy engineering items. Steel and later on FRG containers have claimed pride of place to wooden barrels in the chemical industry. Fibre board drums became a lighter and cheaper alternative to both wooden and steel drums for transporting dry goods.

Similarly, jute sacks have taken over as primary transport containers for agricultural products from the earlier sacks made of wool and cotton. Multi-ply paper sacks received a boost during the War period and later on bituminised sacks became the order of the day. Today, in India, bituminised gunny bags are the major transport carriers of chemicals and fertilisers. Advances in plastics technology made the all-plastics sack possible. Many unit packs can be overwrapped in wraps of kraft paper or in plastic film shrunk to a tight fit by convected or radiated heat. As a result packing offers solutions for transporting not only bulk quantities but also unit packs clubbed into bigger transport packs.

On par with transport packing, unit packing has also made significant strides towards modernisation and development. Glass bottles have been replaced by wax impregnated and polyethylene—lined paper board cartons and polyethylene satchets in the milk trade and soft drink industry. While bottles made of polyethylene and polyvinyl chloride whose contents can be squeezed out are used in toilet preparations, rigid plastic bottles are used for oils and pesticides in smaller quantities. The need to furnish the French army and navy with portable food supplies led to food canning in the nineteenth century. Cans, both tin and aluminium, are now used for ready-cooked products, baby-foods, soft drinks, oils and semi-solids. Aerosol cans, fitted with finger operated valves at the top, are used for a variety of items ranging from pesticides to toilet preparations and paints in spite of the fear that they have a harmful effect on the ozone layer in the atmosphere.

Nowadays non-aerosol spray cans are manufactured to circumvent this danger. The carton being lightweight, collapsible for storage, cheap and disposable and having suitable surface for printing has added a new dimension to packing by providing an easily handled retail unit. Cellophane, plastic and alluminium foil also offer many modes of unit packing which are light, corrosion-resistant and at the same time possess a decorative effect.

Coming to package design, the choice of design is based on functional efficiency and aesthetic appeal. Convenient size for marketing product content, protection and cost are other considerations. The sensitivity of package contents to impact vibration, compressive loading, humidity, temperature, chemical action, bacterial mould, flame and light must also be considered. This is of particular relevence to packaging in India in view of the appalling condition of the highways on which the transport vehicles ply.

All the above developments and considerations have played a role in determining laminated gunny bags as the ideal packaging for fertilisers, chemicals and insecticides. Laminated gunny bags are manufactured by laminating a thin film of LDPE on gunny cloth. Blown bitumen is the adhesive that binds these two together. Once the laminated gunny cloth is ready it is cut into the required size and stitched into bags. It is double stitched to ensure that the contents do not spill out from any end. Lamination ensures that moisture does not seep in and damage the contents and insulates any hygroscopic product from attracting moisture.

In a predominantly agricultural country like India where more and more lakhs of hectares of land is brought under the plough day by day as a result of either the major and minor irrigation works or rural development projects under programmes like ARDP are undertaken by the Government for upliftment of the rural masses, fertilisers have a prominent role to play. As agriculture is the primary source of income over the centuries, fertility of land has come down gradually which has to be replenished every year through fertilisers, and laminated gunny bags ensure that these fertilisers are carried wherever required without any loss of the packed material during transport. A study of the growth of the fertiliser industry during the last three decades justifies the above assertion and gives an indication of the need for laminated gunny bags.

Hence, a steady increase is projected over the years and if more units are set up or existing units are expanded to mop up the deficit the requirement of sacks for packing the same also goes up proportionately. Though all polyethylene bags are also being used on a small scale, laminated gunny bags offer more than a stiff competition because of the inherent advantages they enjoy.

1. Laminated gunny bags unlike the man-made fibre

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sacks can be stacked to greater heights. Hence storing does not pose a problem.

2. Second, pricewise they are comparatively cheaper since the alternative is based on petroleum-based raw material. As India has to depend to a large extent on imports for its petroleum requirements our foreign exchange reserves are getting depleted to import the same. Further, any change in the international scene either political or economic cause ripples which have a telling impact on our economy. Hence, laminated gunny bags have a definite advantage over the others as we have many jute mills in India in addition to jute cultivation in the Sunderbans and imports from Bangladesh.

3. Third. name of the contents can be screen-printed in two or three colours easily and can be set off against the brown background with satisfactory results. As the jute fibre absorbs the ink it can obtain a clear print.

In spite of the advantages listed above, the laminated gunny bag industry suffers from two basic difficulties.

1. The laminated gunny bag industry is raw material intensive. About 90 per cent of the cost of the product is the cost of the gunny cloth itself. Hence, fluctuations in the price of gunny cloth can play havoc with production schedules as working capital requirement will be severely hit with a sudden upward revision in prices, and frequent fluctuations are not anything new to the jute industry. The stringent RBI regulations on working capital finances add fuel to the fire.

2. While the above feature is due either to crop pattern or manipulations in the market, the second disincentive is encountered as a result of the Government policy. The taxation pattern adopted by West Bengal is unfair to the manufacturers of gunny bags outside West Bengal. While the sales tax for purchasers within the state is only one per cent, it is four per cent for out of State buyers. Consequently, plants situated outside West Bengal find it uneconomical and extremely difficult to compete with units situated in West Bengal on equal grounds. Survival in the open market with this uneven tax structure is nearly impossible, resulting in the polarisation of this particular industry in West Bengal with its attendant labour and power problems.

While one cannot suggest that West Bengal be deprived of the ST by offering the relief even to out of State buyers, it is improbable to expect the manufacturers to stand upto this uneven competition. However, the local State authorities can offer enough incentives to offset the tax difference in order to promote the industry, increase the wealth of the State and to generate employment. The state authorities should encourage the location of industry by subsidising ST to the extent of relief that is being obtained by manufacturers in West Bengal. It is also in the interest of the fertiliser industry to see that this packaging industry is dispersed all over the country to ensure an uninterrupted supply of bags.

The growth of fertiliser industry in India
1950-51 to 1980-81

('000 tonnes)

Year	Nitrogenous(N)		Phosphatic (P_2O_5)		Total ($N+P_2O_5$)		
	Installed capacity	Production	Installed capacity	Production	Installed capacity	Production	Capacity utilisation (%)
1950-51	10	—	102	—	112	—	—
1955-56	100	77	106	12	206	89	43.2
1960-61	121	112	128	54	249	166	66.7
1965-66	470	238	274	119	744	357	48.0
1968-69	855	563	434	213	1,289	776	60.2
1973-74	1,947	1,050	581	325	2,528	1,375	54.4
1976-77	2,988	1,862	723	478	3,711	2,340	63.1
1977-78	3,028	2,000	1,005	670	4,033	2,670	66.2
1978-79	3,259	2,170	1,080	770	4,339	2,940	67.8
1979-80	3,891	2,226	1,230	757	5,121	2,983	58.3
1980-81@	—	3,577	—	959	—	4,536	—

Note: @ — Estimated.

SOURCES: (i) The Fertilizer Association of India, Fertilizer Statistics, 1977-78.
(ii) Ministry of Petroleum, Chemicals and Fertilizers; Annual Report, various issues.

Projected demand and supply of fertilisers in India
1980-81 to 1985-86

('000 tonnes)

Year	Nitrogenous fertiliser			Phosphatic fertiliser		
	Requirement	Production	Deficit	Requirement	Production	Deficit
1980-81	4,260	3,577	683	1,172	959	213
1981-82	4,772	3,972	800	1,287	984	303
1982-83	5,315	4,427	888	1,407	1,104	303
1983-84	5,890	5,558	332	1,533	1,104	519
1984-85	6,497	5,904	593	1,664	1,029	635
1985-86	7,135	5,983	1,152	1,801	1,039	762

SOURCE: Fertiliser Association of India

New developments in flexible packaging

By D. D. SHARMA

IN today's highly competitive and showy world, anything and everything must have attractive prices, attractive display, excellent quality and attractive brand name. To satisfy modern sales requirements, packaging systems should protect the goods against mechanical damages, and also should protect the quality of the packaged goods for a long time. A wide variety of packaging materials like paper, paper boards, aluminium foil, PVC, polyethylene, polypropylene, polystyrene are commercially available in the market. These substances if used alone are permeable in various degrees, in the flat condition or after crumpling to water, water-vapour, gases like oxygen, carbon dioxide, aroma (loss or gain of the odour by packaged goods) and oil and fats. Besides this, most of these substances cannot be heat-sealed. To overcome these difficulties, these substances should either be associated between themselves or with certain polymer coatings like PVDC, which provides an excellent barrier to water, water vapour, gases, aroma and fats.

PVDC coated substrates

PVDC coatings are glossy, transparent, colourless, tasteless and involve no toxic hazard even in direct contact with the packed goods. The coatings are scuff resistant also. Due to the chlorine content, PVDC coatings have flame retarding effect. The coatings do not rot and can be heat-sealed at a temperature between 130-150°C. PVDC coated papers have excellent impermeability to water vapour, aroma of items like tea, coffee, *etc*, gases like oxygen, carbon dioxide and oil and grease. They are also impermeable to chemicals, particularly to alkalis.

Polyvinylidene chloride (PVDC) is an aqueous, plasticiser-free copolymer dispersion based on vinylidene chloride and other polymerisable compounds. The different grades of PVDC are compatible with inert mineral colours and special metal pigments. The dispersions can be thickened with acid resistant synthetic colloids which also improves the flow properties. The dispersions are acidic and are anionic. The density varies from 1.25-1.29 gm/cm^2 The average particle size is below 0.24. The dispersions can be diluted with water to any extent.

The Shree Vindhya Paper Mills have taken up the job of manufacturing PVDC coated papers for the first time in India. The trial product is already in the hands of some customers

PVDC coatings are most suitable to produce packing materials for goods which are sensitive to water vapour, gases, *etc*. Any substrate like paper, plastic film, foil, *etc*, can be coated with this copolymer. The papers to be coated with PVDC should have a smooth surface, and a low absorbency. The papers should be sufficiently sized and should have excellent formation. Any type of coating machine equipped with air knife, metering bar, gravure roll or reverse roll may be used to coat the substrates. However, it is necessary to control foam formation by proper adjustment of the machine condition.

Careful control of operating conditions

Foam in the coating produces film of poor impermeability and bad appearance. PVDC dispersions are sensitive to shear force and can coagulate. Shear stresses on the particles, therefore, must be avoided by careful control of operating conditions. Depending upon the substrate and the protection required by the packed goods against water vapour, gases, *etc*. a coat weight of 15-30 gm/m ^{2} gives a satisfactory film. To obtain a film of good flexibility, good impermeability and of good mechanical properties a base coat of softer grade of PVDC is applied to the substrate which is followed by a stiffer grade of PVDC. It is always desirable to apply the entire coat weight in two or preferably in three stages. Whatever be the thickness of the first layer, it is traversed by the fibres emerging from the paper. Besides this, a part of the copolymer is absorbed by the substrate and contains holes in line with the pores of the paper. These fibres and holes provide channels for the penetration of water vapour, gases and fats. Succeeding layers develop a coating film of excellent barrier properties.

The paper coated with PVDC are then dried in the drying tunnel. To obtain a uniform and coherent film of good impermeability the particles of PVDC should deform and interpenetrate during drying operations. The mechanism is called coalescence. The coalescence is directly proportional to surface tension and time and indirectly proportional to particle size and viscosity. In the course of drying capillary force which is imposed by the negative curvature at water surface entraped between the particles acts on the particles. This force helps the particles to move in a viscose flow and brings them together to coalesce.

It is clear that to obtain a film of excellent impermeability rigid controls at the application stage and drying stage are absolutely necessary. The permeability is due to porosity of the material like paper or to its micropores like thin films of foil. Even if these pore, micropores and micro fissures are sealed the penetration of vapours and gases may take place by a three-stage process.

1. Solubilisation of the vapours or gas in the film surface which is in contact with the atmosphere having higher concentration of the gas.
2. Diffusion across the material from the side richer in the gas towards the side poorer in this gas.
3. Desorption from the back face.

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Barrier properties of different PVDC coasted papers

Tests		Glassine + PVDC	Paper+ PVDC
1. Grammage ((g/m^2)		59.26	76.73
2. Tensile strength (kg/cm-width)	M.D.	3.81	2.37
	C.D.	2.11	2.26
3. Breaking length (Metres)	M.D.	6,429.29	3,088.75
	C.D.	3,560.58	2,945.39
4. Grease proofness (sec.)	Paper side	1,800+	1,800+
	Coated side	1,800+	1,800+
5. Water proofness (g/m^2)		—	51.16
6. Water vapour transmission Rate at 38± 1°C and 90±2% R.H. (g/m^2/24 hrs).	Max.	3.80	3.10
	Min.	2.70	2.50
	Ave.	3.27	2.75
7. Blocking resistance		No blocking	No blocking

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The 'big box' is here—but are we ready?

By M. R. SUBRAMANIAN

THE container revolution was heralded into the country in the early seventies by the foreign shipping lines. The picture has radically changed since. Today we are proud of *Indian* container lines. Tomorrow will see Indian owned cellular ships. Besides Indian 'lines', we have domestic production, so far committed for exports, of containers conforming to international standards. Inland container terminals are already being discussed in the southern and northern part of interior India. The 'customs' limits have been relaxed to some extent to provide for door delivery. More relaxation in keeping with the need for speeding up clearance, including of documentation speed up, is on the cards. It seems to be all roses for the Indian exporter. But yet, the industry and trade connected with exports are not yet ready to take maximum advantage of the benefits the 'box' promises.

The container is an intermodal system. It is intended to be carried from door to door *i.e.* from the door of the shipper to the warehouse of the importer overseas, whether both are located at seaports or are reached by land/sea routes. The developed countries and rich developing countries by and large ensure today that the other half is possible. But the problem is with the Indian shipper upto the Indian ports. The handling facilities are not yet installed on the points to be serviced to take care of the loads of 20 to 30 million tonnes at a time.

As the opportunity for filling the container at the point of origin is not utilised, the products require to be packaged in the conventional system, if only, to reach the stuffing point safely. Perhaps, even stronger than conventional packages may be required as the system of stuffing cannot be scientific for a number of reasons, including variety in dimensions of packages to fit into a container, void spaces in the container which are difficult to fill in to ensure safety in transit, etc. Thus, the packaging cost reduction, the main benefit, eludes the exporter.

The third, perhaps an equally important factor, is that relating to maximum use of container capacity. This has a bearing on freight cost and competitiveness of the export product. To fill the container fully with products, the emphasis is on *products*: the package should occupy the minimum space. This is directly related to the material of construction, the shape of the pack and modular dimensions of the pack in relation to the internal dimensions of the container.

The materials of construction of packages, normally involved, using conventional systems of transportation, are timber, steel, plywood, hessian (sacks) and the like. These materials are relatively stronger compared to modern materials that go better with containerised system of cargo. Obviously they are, by and large, more expensive but they are required in the context of the higher incidence of hazards encountered in conventional system of movements. Hessian packages, however, are likely to be less expensive in the Indian context but they result in lower space utilisation within the container capacity available. The other alternative open to the Indian exporter, therefore, is to somehow reach the goods to the stuffing facilities and have these re-packaged in modern materials. This, however, contributes to higher incidence of cost. Apart from this, some of the conventional materials like timber, pose tremendous problems of disposal at the importing markets abroad.

The problem of disposal of conventional materials is not confined only to the developed countries in the world. They are equally a problem even in the rich but industrially less developed countries where labour is quite expensive and hence disposal becomes expensive.

The use of strong packages of timber also demands the use of such ancillary materials like steel straps, which are also treated as hazardous from the point of view of the labour involved in material handling at the destination. Quite often, products packaged in conventional materials are not acceptable to the importers abroad, for they are no more accustomed to handling these and their systems of ware-housing and transportation are not geared to conventional materials as they have gone over to simpler and modern materials for quite some time.

Thus from the point of view of materials of construction the benefit of containerisation cannot be had by the Indian exporter. The other factor relates to the maximum utilisation of the container capacity available. While packages like corrugated board boxes can be made to fine tolerances and they are easily standardisable, it is easier to design their dimensions and produce them with a great amount of accuracy. The more important consideration however is that the volumes occupied by these materials are far less than those taken up by materials like timber, *e.g.* wooden boxes and crates occupy a volume, about 10 to 15 per cent more than boxes made from corrugated board.

The dimensions of the transport packages that are required to be stuffed into containers should be designed in a manner to fit into the length, width, and depth or height of the container (with reference to the internal dimensions). In other words, the dimensions of transport packages used for export will have to be a module of the internal dimensions of the container within which they are intended to be moved. This raises the question of the number of units or related packages which will constitute a bulk package as also the dimensions of the unit packages that contain the product. Therefore, proper utilisation of the container capacity has to start from the dimensions of the primary package, the dimensions of the intermediate package and then the dimensions of the transport package.

Another element of the system is the type of unitisation system adopted. Most developed countries of the world would rather prefer to use unitised loads, such as palletised loads. The reason is that the time involved in the destuffing of non-palletised cargo from the containers is considerable and therefore costs more.

Their system of handling, movement and warehousing uses unit loads as the basis. Standardised pallets are by now conventional for them. This brings in the factor of the pallet dimensions *vis-a-vis* the container dimensions and the need for transport packages to be designed in the manner to fit into the pallet dimensions. Over the years it has been possible to standardise the container dimensions and the pallet dimensions and the Indian exporter will therefore be required to develop the package dimensions in such a manner to fit into both the pallet as well as the container dimensions.

It is, however, true that palletised cargo tends to occupy slightly higher volumes because of the volumes of the pallets involved. But this is expected to be offset by the lower costs involved in the destuffing and other dis-

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tribution operations at the destination.

A recent development in this direction is the adoption of the slip-sheet system in the United States and perhaps in course of time, the Indian exporter will have to think in terms of experimenting with this system which provides for lesser volume and therefore greater efficiency of container capacity utilisation.

Some amount of work is of course being done in the direction of developing modular dimensions through the forum of the Indian Standards Institution but the fact is that many exporters are not too keen in preparing for the container revolution by trying to readjust their packaging systems. This may probably be due to their inability to change the unit container sizes as well as the quantities per package. But it is difficult for the Indian exporter to postpone decisions on change any longer.

Likewise, even though containerisation would minimise the compression strength requirements in the transport pack resulting from reduced stack heights to such a low level of 7' 9" approx. within the container, the benefit of such reduction cannot also be taken advantage of by the exporter because of his own ware-housing systems which have not undergone a change and because he cannot have the facility of shipment from his doors in intermodal containers.

It is quite obvious from the above consideration that for the Indian exporter to reap all the benefits that the 'big box' holds for him he has to introduce certain modifications in his systems. This requires a change in the attitudes as much as it involves a change in the various aspects of packaging adopted by him.

The shape of the packages also contributes to either reducing or increasing the volume occupied by the cargo. Packages made from hessian such as hessian sacks, by virtue of the methods of manufacture cannot form rectangular blocks after filling. Compared to multiwall paper sacks they are less efficient from the point of view of space utilisation. Hessian sacks tend to bulge, which are not conducive to proper stowing inside the containers. It is not therefore surprising that some of the Indian exporters find that quantity for quantity (of the product) they can fill much less in a given container than their counterparts in the rest of the world who use gussetted multiwall paper sacks in preference to conventional jute sacks.

The advantage in freight changes the competitors thus enjoy when 'box rate' is applied put the Indian exporter at a definite disadvantage.

Cylindrical packages obviously occupy a higher amount of volume than those of rectangular forms. But it is indeed a difficult proposition for any major shift in this system because of the inherent problems connected with deviations from internationally accepted conventions in this regard. But this is an area which is worthy of being explored further.

Another advantage offered by the system of containerisation relates to reduced pilferages. The break-bulk system that has to be adopted till the point of stuffing of the containers means that the benefit of minimising pilferage is no more available to the Indian exporter. He is bound to continue to provide for fitments to the packaging systems which will reduce the chances of pilferage. His costs will be higher.

A related matter with the advent of containerisation is that of insurance costs. It is common knowledge that when goods are containerised, the insurance premium in respect of the cargo shipped in containers is lower. This is so in most parts of the world. It is also applicable in respect of goods imported into India in containers. Strangely, there has been no significant thought given to reducing the incidence of insurance on export consignments from India when the containerisation system is adopted. Perhaps, it is a little too early for the insurance companies to be sure of the benefits they have been getting from the container revolution. What would appear to be surprising, however, is that no move has been made by the insurance business to popularise this concept through adequate incentives in the form of reduced insurance premiums.

It is obvious that there is a real and urgent need for greater dialogue among concerned interests to find a solution to issues related to packaging in the interests of expansion of export trade making full use of containerisation.

New developments in flexible packaging

Concluded from page 17

The heat sealing of PVDC coated substrates is controlled by the following four factors: 1. The sealing interface temperature, 2. The contact time, 3. The nature of sealing interface, 4. The contact pressure.

Normally, at a temperature of 130 to 150°C when a pressure of 1.4 kg/cm² is applied for one second provides good seal strength. However, care should be taken to avoid overheating which degrades the quality of PVDC film and also may produce an odour which is not desirable.

Alternatives

Besides the substances mentioned, paper/aluminium foil laminates have been quite popular in the market. They can be used to pack the pharmaceutical products, instant coffee, instant soups, biscuits, etc. The interest in this laminate is due to the association of the characteristic of the two substrates: 1. Paper which has good mechanical properties and easy to process. 2. Aluminium foil which has very good appearance and barrier to ultra violet rays, water vapour and gases.

As the aluminium foils above 9 to 10 microns are quite expensive, they are rarely used for the purpose. Thin films of aluminium contain micropores. Although in flat condition, this product has very good impermeability to water, water vapour and gases, yet fat seeps through the pores of the film. In the crumpled conditions, the film is cold drawn and sometimes even breaks and its impermeability is badly degraded. The laminate when coated with PVDC overcomes all these defects. It improves the impermeability, especially after crumpling. The laminate can be heat sealed. Either side of the laminate can be coated with PVDC.

To satisfy the requirement of highly flexible packaging paper/polylaminates are quite popular. They provide good resistance to water and water vapour, but impermeability to gases and fats is very poor. If the laminates are coated with PVDC, the film become impermeable to vapours, gases, aroma and fats. Either side of the laminate can be coated.

PVC and polystyrene films can also be coated with PVDC. Such films have good barrier properties and provide an excellent material for flexible packaging. Special techniques are followed while coating, laminates like paper foil and paper/poly and films like PVC and polystyrene.

As the prices of the packaging materials used by pharmaceuticals or confectionaries are fluctuating like shares in the share market, it is necessary to develop new products which can satisfy the requirements imposed by the modern sales and distribution system. Shree Vindhya Paper Mills have already started work in this direction.

EASTERN INDIA TODAY

Cut in Orissa's Sixth Plan

By **P. C. MAHANTI**

CALCUTTA

IF the Orissa Government is resenting the sharp cut in the Central allocation for the State's Sixth Plan and considers it to be a bolt from the blue, it is fully justified. The entire plan has been drawn up at Rs 1,500 crores only out of which the State itself had agreed to find Rs 775 crores, which is more than 50 per cent of the total outlay. The Centre had originally agreed to provide Rs 725 crores but, in a recent communication, it has informed the State Government that the Central share stands reduced to Rs 660 crores—a straight cut of Rs 65 crores without much justification.

When the Prime Minister, Mrs Gandhi recently went to Orissa to make an on-the-spot assessment of Orissa's plan performance, the Finance Minister of the State submitted a memorandum to her deploring the cut in the Central plan allocation for the State's Sixth Plan pointing out at the same time that the State's tax machinery has been fully geared to raise additional resources for financing the development plans. In fact the State has now fully stretched its direct tax resources, asked the public sector enterprises to produce the maximum surplus they can, and followed all the financial disciplines expected of a State Government, the memorandum stressed.

It is possible that the Centre itself has come under greater financial strain than before and fears loss of revenue buoyancy because of tax reliefs, subsidies and, by and large, unfavourable economic climate. But the Central budgetary position is unlikely to deteriorate to such an extent that it cannot meet its full commitment of Rs 725 crores over a four-year period and a reduction of Rs 65 crores had to be made. This speaks of a penny pinching mentality. An amount of Rs 65 crores could be easily found by economising on projects which are largely wasteful and also by a more efficient planning of public expenditure. The cost overruns in several large central projects, to quote the example of Calcutta Metro Railway as a typical case, have already exceeded hundreds of crores of rupees and all because of poor management and inefficient budgetary planning. Orissa's demand by comparison is indeed small. It is expected that the Prime Minister, if she means to follow a policy of balanced regional development, will consider the Orissa Finance Minister's memorandum sympathetically and have the cut restored.

Orissa is a state where the percentage of people living below the poverty line is the highest of any state in India and where the per capita income falls in the lowest bracket. In fact the gap between the State's per capita income and the national average has kept widening with years. It is a fit case where the policy of balanced regional development needs to be applied first. Rupees 65 crores is a small sum for the Central Government but if the State were to raise this additional amount by further taxation then it would have to impose extra hardship on the people whose taxable capacity has already reached the limit.

Wagon shortage

The Coal Consumer Association of India with its headquarters in Calcutta fears that, in view of the coming heavy import of foodgrains, sugar, edible oils and other industrial raw materials, the railways may have to divert a large number of wagons to move the imports from ports to different destinations in the country. This is likely to affect wagon supplies for coal loading. Coal loading demands the maximum number of wagons from November onwards when collieries work at the peak levels of efficiency. It is precisely during the winter months that imports of foodgrains, sugar and edible oils are likely to land in the country and in heavy quantities at that. The railways cannot meet the demand of this traffic as well as of coal loading satisfactorily at the same time and intelligent planning based on clear cut priorities can alone save the situation.

The Coal Consumers Association has made the following suggestions so that high priority accorded to the prospective unscheduled movement does not result in disruption to the usual traffic or curtailment of wagon supplies to the priority sectors like coal. First of all there should be prior allocation of the least congested ports for unloading of imported cargo and the railways should chalk out the movement programme as well as the wagon allotment schedule well in advance. Secondly, if imported cargo is to be diverted to ease congestion on already congested routes it should be done in a planned manner so that extra congestion does not occur on routes where traffic is not usually heavy. Thirdly, short-term infrastructural facilities should be extended at the unloading ports wherever necessary so that prompt clearance of traffic is made. Finally, the higher imported goods traffic should not on any account lead to curtailment of monthly allotment quotas for industrial consumers of coal who are mostly in a hand to mouth situation in the matter of supplies these days.

The association's representation to the Government about this matter contains a timely warning. If the movement of coal to industrial consumers suffers on account of competing demand from and unscheduled heavy traffic resulting from the coming imports, then not only will industrial production suffer but the coal industry as well. Transport is very much part of the production process in the coal industry as well and any disruption in railway movement of the fuel is bound to disrupt coal production. Sixty-five per cent of the country's collieries are in eastern India and the economy of this region will get a shock if the coal production suffers a setback.

Mini cement plants

The north-east region which has always been experiencing on acute scarcity of cement will have four mini cement plants during the Sixth Plan period. The Planning Commission has cleared four projects one each for Arunachal Pradesh, Nagaland and Assam. The fourth one will be allotted to one of the remaining states but to which one has not been decided yet. These projects involve an investment of Rs 9 crores and together they will have a production capacity of over 300 tonnes per day. The plant in Arunachal Pradesh will be based on the vertical shaft kiln technology developed by the Cement Research Institute. It is likely that the same process will be adopted in the other centre. The process is considered more efficient than the prevailing processes operating in the country.

BOOKS & IDEAS

Regional imbalances in UP

Patterns of Regional Development—A Comparative Study

By Ajit Kumar Singh

Sterling Publishers (P) Ltd., AB/9, Safdarjang Enclave, New Delhi 110 016; Pages 302; *Price Rs* 75.

In our country where balanced regional development has been accepted as one of the most important objectives of planning, the significance of regional studies can never be over-emphasised. What adds greater significance to the subject is that regional imbalances in the country prevail not merely at the state level but also within the states. As a classic example in Uttar Pradesh, one of the largest states in the country, one can find significant difference in the level of development attained in different regions of the State. While the eastern region of UP is very much undeveloped, rural and known for long for its extreme poverty, western UP, particularly the Meerut-Kanpur belt, is one of the most prosperous regions of the country. As both these regions of UP are quite comparable in area, population and resource endowment, a comparative study of economic development in these regions can help to understand and solve the basic issues in regional development.

The author, (Prof) Dr Ajit Kumar Singh of Lucknow University has in the book under review arrived at a systematic study combining both empirical and theoretical approaches to verify the generalisations concerning regional economic inequalities. Covering the period between 1951 and 1975 or a span of 25 years of planned economic development, the study attempts to (1) quantify the differences in the levels of economic development of the two regions, (2) race the rate of growth during the plan period; (3) identify the problems retarding the development and (4) suggest uitable measures for promoting balanced regional development.

The analytical frame of reference dopted in the study is that of 'sector heory'. The differences in the levels of development have been related to the differences in the economic structure of egions and districts. The 'sector theory', t may be added, has been largely applied to nations or macro-regions but has been quite revealing at the micro-level as well.

Within this frame, the growth and problems of major sectors of the economy have been examined. An attempt has also been made to go beyond the 'sector theory' to examine the problem of poverty in a larger perspective and identify the critical variables in economic development and establish links between different segments of the economy.

On account of the considerable intra-regional economic disparities in the eastern and western regions of UP, the author has taken two sub-regions in both the regions on the basis of levels of development. Wherever possible, district-level analysis has also been attempted, which in turn, has helped in highlighting several facts which tend to be concealed at the regional level.

However, he has admitted that a major handicap in conducting the study has been the paucity of literature dealing with the problems of Uttar Pradesh. He has relied mainly on secondary data from official sources. But, as is always the case, official data are published and made available with considerable amount of time lag. Nevertheless, Dr Singh has developed an analytical framework for regional studies wherein a wealth of data has been compressed.

After tracing the development policies in UP under the different plans, the author has pointed out that while weightage was given to backward regions in the matter of allocation of funds, the plans were not prepared on a regional basis nor a regionwise breakup of broad targets attempted. Further, according to him, no technically competent machinery for preparation of state or regional plan was created by the State Government. It was only recently that the State Government has reorganised the planning machinery by creating a State Planning Institute.

While a few public sector industrial projects have been located in eastern UP their impact on regional balances has been minimal as, the total investment has been small. The planning of these projects has been defective as they have not been visualised as nuclei for the development of regional economies. He, however, does not favour encouraging private investment through the creation of overhead facilities on the ground that once investment in social capital is stopped, the region may fall back again to a lower level of income and employment. The necessary preconditions for the success of 'overhead capital approach' like highly responsive market mechanism, high degree of capital mobility and the existence of a vigorous entrepreneurial class are all absent in Uttar Pradesh.

With a view to having a balanced regional development, he has advocated the need to markedly step up the rate of investment in both the regions of UP if the problem of absolute and the relative poverty is to be effectively solved. Resources could be mobilised for this purpose, both from within and outside the State. The strategy of development to be followed should be arrived at by minimising the natural handicaps like floods of the region and expanding overhead capital facilities. Transport and power facilities, if improved, the infrastructure of the region would considerably change resulting in growth of agriculture and industry.

He has further suggested the need to impart training to local entrepreneurs in large numbers and provide them fiscal incentives to set-up industrial units.

Several of these suggestions made by the author to industrialise and develop UP in a balanced manner are nothing new. But, at the same time, they are worth serious consideration by the authorities concerned. The author spent quite some time in studying this problem and his views surely merit attention.

Raghu

Growth of agro-industries

Agro-based Industries: Performance and Prospects

By Badar A. Iqbal

Printwell Publications, Aligarh, 1981; *Pages* 120; *Price Rs* 40.

Even after three decades of economic planning, a significant proportion of India's population continues to depend on agriculture for its livelihood. Nearly half of India's national product is accounted for by the agricultural sector. In such a situation, agro-based industries could contribute substantially to the advancement of economic life of any developing country. These industries provide a base for a pattern of socio-economic development that can contribute to an all round growth of the economy. In fact, they operate as catalytic agents for development of agriculture and help in bringing the gap between rural and urban areas. For a country in India's position, the path to economic goals involves a synthesis of both agriculture and allied industries.

The book under review consists of thirteen papers which are updated reproduction of the author's articles, published in India's journals and newspapers, which in turn were the outcome of the material collected by the author for his PhD thesis. The articles in this book deal with rubber, tea, jute, sugar, coir, sericulture, coffee and a few other agro-based industries. Wherever possible, the author has given trends in the world production in the industry under discussion, trends in India's production, imports and exports, statewise position, and an analysis of the end-use industries. It is, of course, obvious that each industry demands a somewhat different treatment than any other. The author has well observed this point and accordingly treated each industry as the need demanded.

Thus for example, in the article on the rubber industry, the emphasis is on area under natural rubber, replantation and extension problems. In the article on tea industry, the focus is mainly on regional performance—north-east versus south—exports and prices. Export potential is the main theme in the article on leather and leather goods as also in that on tobacco. The author has also discussed growth constraints on these various industries. At places, he has referred to studies made by institutions such as Indian Council of Agricultural Research (ICAR) and the National Council of Applied Economic Research (NCAER).

Another noteworthy feature of the book is that the author has by and large confined himself to factual presentation, avoiding being partisan and making value judgements. And yet, one can see research-oriented mind working here, having a flair for figures and also a penetrative skill that looks through statistics. The major merit of this compilation of articles is that it provides a fairly vast span of agro-based industries within its covers.

Abhijit Doshi

Rural poverty and unemployment

SIR,—I have seen the comments on my paper—"Full Employment, Reduction in Inequality and Eradication of Parallel Economy" in the *As I see it* feature by Subhash Chandra Sarker published in *Commerce* dated July 11, 1981. The main point that struck me was the assertion in last para of column that "Mr Mehta, not surprisingly, has not been able to put forward any workable suggestion beyond making some very general observations which is capable of myriads of interpretation......etc......etc" I would like to inform you that I have not tried to beg the question.

I am writing another small paper giving full details about the methodology for achieving these objectives quantitatively and qualitatively—how much finance it will require, how much employment each village industry can generate and at what cost. Some excerpts are reproduced below from the same.

"......The productions of these large industries will have to be upgraded, made super, so as to make them fit for export and be exported as these are to be transferred to the village sector. If necessary, best foreign collaborations for this should be obtained as they do in Hongkong, Taiwan, South Korea and other countries. We will have to follow the Japanese, who today are far superior in technology to USA so much so that their productivity is 40 per cent higher than that of USA and 50 per cent higher than Germany and 100 per cent more than South Korea and Taiwan. This will earn thousands of crores worth foreign exchange which will solve our foreign exchange problem as also problem of local finance as new extra productions start in the villages. This will also create more purchasing power all round and in every corner in the villages in the country......"

"......Having gone full steam ahead, for the last thirty years, in adopting large scale and high technology, having become the 10th biggest nation in the world on high technology (according to Finance Minister, Mr R. Venkataraman, we are the 6th), we can now afford to have a pause and think as to what we should do in future, specially when the results have been, due to any cause whatsoever, tremendous increase in the under-employed and unemployed. Meanwhile, during this pause of few years, we may stop any further enlargement of large sector and produce atleast 25 per cent of our necessities in villages in small and home technology and provide employment to the unemployed and under-employed. After this will be the time to again start gradually higher and higher technology even to the levels of Japanese and further. Today to me not to employ our large population is suicidal and dangerous......"

In a small way, I am trying to prepare an integrated model in ten villages, to be extended to 20 and then to 50 villages, but that would be a drop in the ocean. The first five years had to be spent on the organisation to build up the infra-structure. I am now in a position to say that that within the next two years, the people in these ten villages who want employment or work will have adequate opportunities to get it. This would have been perhaps faster if local politics and bureaucracy were not slow and were more helpful. Already cattle-breeding, fodder-production, agriculture, gobar gas, water-supply, house-building and half-a-dozen "home" industries such as *ambar charkha*, tailoring, leather, agarbathi-production, milk processing etc are working; and another half-a-dozen will also start working during the year.

I am extending these activities after six months to another group of ten villages. The effort is to develop a micro-level model to show the feasibility of meeting the problems of unemployment and rural poverty.

I think the solutions suggested by me in my paper are not impossible to implement and thereby to achieve the necessary results, *if* the Government and the administration have the *will*. I am not sure of the existence of this "boldness" and the "will", both on the political and the administrative levels. Can we not take some drastic measures, specially when we have a very popular and powerful Government at the Centre?

Vadilal L. Mehta

AHMEDABAD

To The Editor

LETTERS

COMMERCE WEEKLY
Manek Mahal, 90 Veer
Nariman Road, Bombay-400 020.

The Sandur Manganese & Iron Ores Limited

SPEECH BY SHRI Y. R. GHORPADE, CHAIRMAN, AT THE 27TH ANNUAL GENERAL MEETING HELD ON 25TH SEPTEMBER, 1981.

Ladies and Gentlemen,

I have great pleasure in extending to you a warm welcome to the 27th Annual General Meeting of the Company.

The turnover of the Company reached a record level of Rs. 17 crores for the year ending 31st March 1981, resulting in a net profit of Rs 226 lakhs after providing for depreciation of Rs 98 lakhs, as compared to a net profit of Rs. 224 lakhs after depreciation of Rs. 74 lakhs during the previous year. This result has been achieved in spite of various adverse factors and difficulties, including an average power cut of 30 per cent during the year, which was as high as 79 per cent during the first quarter of the year. The excellent reputation enjoyed by our products, especially our low phosphorous pig iron and ferrosilicon, has enabled the Company to safeguard its working results during the year, and declare a dividend of 12 per cent as against 10 per cent last year. I am grateful to all my colleagues on the Board and the financial institutions for their valuable guidance and support. I am happy that the Board of Directors have, on more than one occasion, expressed their appreciation of the good work done by the Managing Director, Officers and employees of the Company.

I have to, however, bring to your notice that towards the latter portion of this financial year, the Karnataka Government and the State Electricity Board decided on a Sudden and steep increase in the power tariff, by passing an ordinance in November 1980 and by further increasing the rates in February 1981, as a result of which the monthly power bill of the Company has gone up from Rs. 44 lakhs to Rs. 74 lakhs, amounting to an increase in the annual power charges from Rs. 5.3 crores to Rs. 8.9 crores. This is in total disregard of the existing agreement between the Company and the State Electricity Board for supply of power at an agreed rate, on the basis of which it was possible for the Company to attract adequate investment from financial institutions and other shareholders for the establishment of an electro-metallurgical industry in Karnataka, at a capital cost of approximately Rs. 13 crores. It may be recalled that the Company had entered into a 10 year agreement with the Electricity Board in 1968 for supply of power to its 15,000 kVA pig iron furnace, and a 12 year agreement in 1972 for supply of 40,000 kVA power to its Ferrosilicon furnaces. Later the Company itself agreed to a revised agreement, which came into effect from 1975, and which not only increased the power rate, but also provided for a reasonable escalation in power rates every five years, in proportion to the general increase in rates for high tension consumers. As a result of this revised agreement, the power rate was increased from 5.5 paise per unit in January 1975 to 12.71 paise per unit in January 1980 (excluding Central Excise duty of 2 paise for unit and State duty of 0.75 and 0.25 paise per unit for pig iron and ferrosilicon respectively). This rate is revisable upwards in 1985 on the principle of proportionality, which is clearly spelt out in the existing agreement. But, the rates were abruptly and unilaterally stepped up to about 20 paise per unit in November 1980 and to 27 paise per unit (inclusive of Central excise and State duties) in February 1981. The Company has represented to the State Government and the Karnataka Electricity Board in this regard, urging them to take a just and equitable view, consistent with our existing agreement. I do believe that scrupulously honouring commercial agreements is a necessary part of orderly economic development and credibility in any country, and is in the best long-term interest of speedy industrial growth and progress.

As you are aware, our second ferrosilicon furnace went into production in September 1980, completing the Rs 10 crore Ferrosilicon Project for the production of 24,000 tonnes of ferrosilicon per annum in two 20 MVA furnaces. However, as a result of power cut, the Company was able to produce 29,000 tonnes of low phosphorus pig iron and 12,000 tonnes of ferrosilicon during the year. The domestic market for ferrosilicon continues to be sluggish and the import of ferrosilicon by the Steel Authority of India Limited also affected the internal demand. Now, export of ferrosilicon is being permitted but the international prices are not attractive. However, it is expected that the demand for ferrosilicon will pick up both in the internal and external market with the improvement in steel production.

As regards maganese ore, the Company has to maintain a certain level of production in order to sustain its large labour force of about 3000 employees at the Mines, and keep the unit cost of production within reasonable limits. The geological prospecting and quantitative surveys undertaken by the Company have revealed that the reserves of low-grade manganese ore (30 per cent to 40 per cent Mn.) in our mining concession, run into millions of tonnes, and are more than adequate to sustain our present exports and also take care of the future needs of the steel plants in the South. In view of this, the Government of India should reconsider its policy of restricting manganese ore exports, especially of low-grade ores, which are available in abundance and can earn valuable foreign exchange while providing labour-intensive employment. Our mines are geared to a production of about 2 to 2.5 lac tonnes of manganese ore per annum. However, due to export limitations which have weakened the position of Indian manganese ore in the world market, the production and sales of manganese ore of the Company have also been adversely affected. The Minerals & Metals Trading Corporation of India Limited, through whom manganese ore exports are canalised, is working under the same limitations, as a result of which the export of Sandur Manganese Ore during the year was only 86,000 tonnes, apart from 35,000 tonnes supplied to M.M.T.C. at Vizag for blending, and sale of 8,000 tonnes to local ferromanganese producers. Smiore has represented to the M.M.T.C. that they should consider giving a more realistic rupee price to the Company by their retaining only a reasonable commission, so that the foreign prices obtainable for its manganese ore are substantially passed on to the Company, to enable it to sustain its large labour force without incurring losses in the manganese ore division. The Company is also catering to the local demand for its ores from ferroalloy producers. In due course the steel plant at Vizagapatnam and the proposed Vijayanagar Steel Plant in the Sandur-Hospet region are expected to enlarge and strengthen the local demand for our manganese ore. The Company is making efforts to beneficiate its low-grade ores in order to improve its local sales and achieve a better balance between production and sales.

In spite of all the problems that the Company has had to face, it has largely succeeded in maintaining and improving the standard of living of its employees, even under the present inflationary conditions. The Company continues to supply the following essential commodities to its employees at prices prevailing in March 1972: Rice (Rs 1.40 per Kg), Jowar (Re 0.75 per Kg), Tur Dhal (Rs 1.80 per Kg), Jaggery (Rs 1.38 per Kg), Sweet oil (Rs 3.63 per litre), Chillies (Rs 2.96 per Kg) and Gram Dhal (Rs 2.00 per Kg). The difference between these and current prices are subsidised by the Company. A package of these essential commodities, which each employee is entitled to, is supplied at Rs 70/- while it costs Rs 180/- in the open market. The subsidy amount has gone up from Rs 17 lacs in 1979-80 to Rs 31 lacs in 1980-81 and will be Rs 60 lacs in 1981-82. This is the real measure of inflation in terms of some essential commodities which form an inevitable part of consumption. This approach of the Company to protect the worker from the ravages of inflation has been widely welcomed by all our employees and is capable of wider application in the country. The Company also runs canteens at different workspots and supplies eatables at subsidised rates. Idly, Vada and Tea are supplied at only 5 paise each. In addition, revised pay scales were introduced from 1st July 1981 in order to rationalise the salary structure on a scientific job-evaluation basis and ensure adequate annual increments and career progression.

The Company caters to the all-round development of its employees by undertaking a variety of welfare measures in the field of housing, education, health, nutrition, recreation and cultural activities. A sustained effort is made to improve the housing facilities both at the Mines and Metal and Ferro Alloys Plant. Last year about 350 new quarters were completed at the Mines and it is proposed to build another 500 quarters in the coming years. At the Metal and Ferro Alloys Plant, 100 houses have been completed and another 150 are under construction, as part of a modern housing colony at Vyasapuri with facilities such as school, hospital and other amenities. The colony will be completed in a phased manner over the next few years. It shall be our earnest endeavour to make Vyasapuri not only architecturally elegant but culturally rich and sensitive, based on values which reflect the heritage of Karnataka and our country, and are conducive to a happy community living and striving towards perfection. The Company has also introduced a scheme of housing loans to its employees who have put in a reasonable period of service. These loans, not exceeding 40 months' salary, carry a low interest rate and are recoverable in monthly instalments spread over 12 years. This is to enable the employees to own their own houses, which contributes greatly to their sense of security and well-being, at a time when it is becoming increasingly difficult to construct houses out of current savings. Interest free loans are also given to employees to enable them to possess a cycle and a sewing machine.

The Company runs and supports educational institutions at the Mines, Plant and Sandur, and also provides scholarships for post-matric studies to the children of its employees. Particular attention is paid to child-nutrition by supply of milk to all school-going children, as part of a comprehensive programme for the welfare of children, women, disabled and the aged. The Company wants to pay special attention to providing training for skills and productive employment, to supplement the family income of employees. It is already providing extension services in agriculture and animal husbandry with the same objects in view. The scheme to enable employees to maintain a small poultry unit and a milch animal has made very good progress. One thousand family poultry units have come into existence, and more than a hundred employees have been enabled to own and maintain a milch buffaloe, and these numbers are on the increase.

Smiore attaches special importance to the growing of plants and trees wherever possible and to the development of environmental consciousness among its employees. Our Prime Minister, Smt Indira Gandhi, made a powerful plea for the preservation of environment, in her recent address at Nairobi to the United Nations Conference on New and Renewable Sources of Energy. She expressed her great concern for trees by saying: "If the laws of nature are thwarted, renewable sources will be exhausted. The indiscriminate felling of trees had denuded our forests with disastrous ecological imbalances affecting the very quality of life. In its sternest form nature retaliates against the scars of treeless mountain-sides, causing landslides and devastating floods and silting dams and rivers. Rainfall begins to dwindle and the desert resumes its deathly march". Towards the end of her inspiring address, she significantly struck a spirutual note by posing a question most fundamental to the future of mankind: "We speak of renewable resources. Isn't the human spirit the most potent of them all? Let us join in invoking the human spirit, in rescuing it from apathy and resignation and making it buoyant and spontaneous once again". Smiore wholeheartedly joins in the invocation and pledges to do its bit in this exciting challenge of life and renewal.

Thank you, Y. R. GHORPADE

Yeshwantnagar,
25th September 1981.

NOTE: This does not purport to be a record of the proceedings of the Annual General Meeting.

The Calcutta Electric Supply Corporation (India) Limited

Extracts from the Annual Review by the Chairman, Mr. Bhaskar Mitter

The Company's operations had a successful year as will be evident from the Annual Accounts for 1980/81. Our old stalwart power stations added another worthwhile year to their long record of faithful service and delivered during the year a total of 1530 million units to the system compared to 1500 million units last year. This level of generation was achieved despite the handicaps of our ancient plant, and despite our having to take out of service the 50 MW No. 3 Turbo-Alternator unit at New Cossipore Station for major overhaul of the machine, long overdue, including complete rewinding of the generator rotor, its mechanical repair, and retubing of its condenser. Although this Power Station of ours has always been known as 'New Cossipore', in fact it is now a unit of venerable age. The name of the Station is thus somewhat of an anomaly, rather like Calcutta's celebrated 'New Market'.

Whilst the Company's own generation was maintained at the expected level, unfortunately little relief could be given during the year to the public, suffering for so long under the malignant spell of power cuts. Our generation can at present cater for somewhat less than half of Calcutta's requirements, and the balance has to be obtained from other power agencies. The availability of this balance has been most erratic and subject to frequent restrictions. Despite this generally morose background, I would mention that since February this year restrictions on the import of power from DVC has eased appreciably.

The work on our Titagarh Project is progressing steadily. The construction site at Titagarh was a busy hive of activity as a multitude of separate erection jobs made further progress, bringing the ultimate shape of the new Power Station into sharper focus. Erection of the steel structures, a major critical activity, is on schedule. The structures for the first unit have been completed, allowing placing of pre-cast roof slabs and casting of floors at various levels, while the work on the remaining units continues. The top tables for all the four Turbo-Generator units have been cast ahead of schedule. Erection of the Turbo-Generator and its associated auxiliaries for Unit No. 1 is well in hand. Satisfactory advance has been made in the erection of boilers of all the four units, although there have been occasional constraints of materials, and the work on Unit No. 1 has in fact reached an advanced stage. The chimney for the first two units is expected to be ready by December this year. Work is progressing on the demineralisation, coal handling, and ash handling plants; work on the 33 kV switchgear, and C.W. Pipelines is more or less on schedule. The one major problem that we are presently up against is in the construction of the C.W. Pumphouse where there is currently a slippage of about three months because of very difficult soil conditions and constraints of space. Every effort is being made to make up this slippage by working round-the-clock. Barring unforeseen circumstances, we are reasonably hopeful of being able to commission the first unit by December 1982, provided the various manufacturers of plant and equipment on whom we have placed orders do not fall behind their own delivery schedules.

Capital Expenditure including Works-in-Progress during the year totalled Rs. 54.97 crores, which includes about Rs. 44 crores on the Titagarh Project.

To meet the increasing demands for working capital the Company recently launched a Scheme to raise approximately Rs. 9.3 crores by way of Public Deposits and I am happy to report that the entire sum was collected within about five weeks. We have been greatly encouraged by the overhelming response to the Scheme by members of the public and the confidence in the Company they have thereby demonstrated.

The declining trend in unit sales which surfaced in 1977/78 has been stemmed in that a total of 2750 million units were sold in the period under review against 2743 million units during the previous year. Sales to Domestic, Commercial and Medium & Low Voltage Industrial Consumers were marginally better, whereas sales to High Voltage Industrial Consumers suffered a slight decline.

Gross revenue from the sale of electricity increased from Rs. 98.43 crores to Rs. 125.37 crores. The additional revenue accrued partly from the increase in our rates with effect from 16th April, 1980 for all categories of consumers. The increase was necessary in view of the substantial increase in the Company's operating costs, including a 16 per cent rise in basic cost of power purchased from the WBSEB, and also to cover the liability for additional wages to our staff for which a settlement with the labour unions was reached during the year. Apart from an increase effected in June, 1978 to cover the Excise Duty levied by the Central Government from 1st March, 1978, a comprehensive rate revision had last been made in 1976.

Another part of the increase in gross revenue was due to the increase in the fuel surcharge rates so as to cover increases in the cost of fuel used in the Company's Generating Stations as well as those of DVC and WBSEB from whom the Company purchases power. The increase in revenue on account of additional fuel surcharge was, however, off-set by a corresponding increase in the Company's operating costs on account of fuel consumed and electrical energy purchased from outside agencies. The cost of coal consumed by the Company showed an increase of Rs. 388 lakhs mainly because of a substantial rise in freight charges and in basic prices of all grades of coal during the course of the financial year.

Since the close of the year under review a revision of the Company's tariff to High Tension consumers was made with effect from 1st June, 1981 to cover the rise in basic cost of power purchased from DVC and

(*Continued on page* 580)

Leap into the steel age

Concluded from page 538

produced through the APC furnace process. It would take perhaps another half a century for this process to become popular. In case of Pakistan, this process could be of vital importance as it is gas-propelled and gas here is in abundance. But gas-propelled steel plants are still a matter of future proposition.

The present Rs 25,220 million steel mill project at Pipri is the ultimate result of Pak-Soviet agreement which was signed in January 1971. Earlier, based on the feasibility report prepared by Soviet experts, Pakistan had decided in 1969 to set up this steel mills which was to be based on imported iron ore and coke. The offer to help Pakistan in establishing the steel project was made by Premier Alexei Kosygin during his visit to Pakistan in 1968. During the two years from the date of signing of the agreement till the laying of the foundation at Pipri on December 30, 1973, the change of site also took place. It was changed from Buleji to the present site of Pipri at a considerable cost. The argument for changing the site was that the steel mills will spread pollution to the city of Karachi if located at Buleji. However, the original cost of construction with Buleji as the location of the steel mill project was Rs 13,420 million. That was in 1974-75. Now the total cost is Rs 25,220 million.

The escalation in the project cost has also been due to increase in prices of steel, cement and wages, the three main ingredients in setting up a steel plant. The Rs 13,420 million estimate was based on 1972 prices. Another reason for revised cost is the addition of items which were not originally provided. For instance electric and gas pipelines are designed for greater loads. The repair workshops which would have been set up at a later stage are now functioning and producing small parts; originally they were supposed to be obtained from Soviet Union. Similarly the change in the mode of finance has also added to the cost. The Pakistani part of the cost has been raised through debentures on which the total payment of tax would be Rs 1,760 million.

It is believed that delay in the setting up of the project was attributable to an unrealistic schedule which was prepared and followed during the 1973-77 period. The new schedule was decided upon in 1977 and then confirmed by the Soviet experts in 1978. Since then work on the project is going apace. A latest brochure has this to say on the progress of work, "Construction activity on the main plant complexes started in the first quarter of 1976, was proceeding at a leisurely pace and, on overall project basis, only 12 per cent progress was achieved by June 1977". In what looks like a self-adulatory appendage, it goes on to add that during the past two years the progress of work has indeed been spectacular; from a meagre 12 per cent in June 1977, the overall progress in September 1979 has risen to 53 per cent. Now that one blast furnace has been commissioned, this claim can hold on merit.

The steel mills is a gigantic project. Its installations will consist of two coke-oven batteries, two sintering machines, two blast furnaces, two pig casting machines, one mixer, two converters, casting machines, scrap preparation plant, billet mill, hot strip mill, cold rolling mill, galvanising unit and section forming unit. It will have five sections including construction base, metallurgical training centre, infrastructure facilities, main plant and township. The conveyor belt transports twenty tonnes of raw material in 55 seconds. In fact, ship unloading of raw material is the first point from where the process of steel-making starts. To handle a project of this size and complexity of the steel mill was a challenge to Pakistan; particularly so while it did not have enough experience of the varied kind of skills and expertise which would go into building it.

The two most striking features at the site are long conveyor belts because everything here is handled in large quantities and transported through these belts. The other is the underground works which, as one steel mills engineer put it, would be much more than the works above ground. The underground structure has been constructed for the two million capacity.

Imports of coal and ore have been tied up. According to arrangements, which have been finalised, the supply would be arranged from diversified sources. For instance, 35 per cent coal and coke will be obtained from Australia, 27 per cent from Canada, 20 per cent from USA and six per cent from Sharigh coal mines in Pakistan. Similarly iron ore will also be imported from different sources which are likely to be a combination of Australia, Brazil, Venezuela, Canada, India and Liberia. While arranging for raw material; it has been ensured that security of supplies is maintained.

The annual raw material requirements on full production and end products are as shown in Table 1.

Table 1 : Raw materials and end products

Raw Materials	
Imported	
Iron Ore	2,030,000
Coking Coal	1,360,000
Manganese Ore	50,000
Local	
Limestone..	430,000
Dolomite	242,000
Fluorite	4,000
Refractory clay	44,000
End Products	
Billets	260,000/400,000
Hot Rolled Sheets ..	445,000/305,000
Cold Rolled Sheets ..	90,000
Galvanized Sheets ..	100,000
Formed Sections ..	120,000
Total ..	1·015,000
Coke	215,000
Pig Iron	135,000

These products would be able to meet two-third demand of the country by 1984 when full production level of one point one million tonnes is achieved. According to PASMIC estimates total demand in Pakistan by that year would be 1,560,480 tonnes. The rest will continue to be imported. Pakistan would be saving and earning foreign exchange worth two hundred million dollars as a result of the production of steel from this mill. According to an agreement signed with the Soviet Union the surplus steel will be lifted by them thus saving the steel mills an oversized inventory. This agreement has also given a major rescheduling of repayment which has been described by project officials as a "substantial relief". Originally repayments were to start after one year of receipt of equipment. Now they will start after one year of the commissioning of the project. Some of the Soviet equipment which was supposed to be obtained on cash has also been transferred to credit on commercial terms. The USSR also gave 36 million dollars, under this agreement, to the government for other foreign exchange needs. The agreement provides a new rouble-rupee

Table 2: Pakistan's imports of steel products from 1972-73 to 1977-78 and projected demand upto 1984-85 (at 10% growth rate on the import during 1977-78)

Financial Year	Quantity in Tonnes
1972-73	424,818
1973-74	424,446
1974-75	513,611
1975-76	526,683
1976-77	804,142
1977-78	800,776
1978-79	880,854
1979-80	968,939
1980-81	1,065,833
1981-82	1,172,416
1982-83	1,289,658
1983-84	1,418,623
1984-85	1,560,486

parity which would be applied only to half of the Soviet credit. Half of it which had already been utilised before the signing of the agreement is exempt from the new rate of exchange.

One of the severest criticism of the steel mills project has been on the ground of cost efficiency. It has been said that the cost of steel produced in Pakistan would be higher than the cost of imported steel. In that case, it was argued that Pakistani steel will either have to be subsidised or duty on imported steel will have to be further increased. In answer to this criticism the chairman of the steel mills argues that operational results of steel mills as originally projected were based on estimates of landed cost of end-products and not on CIF prices.

Even critics admit that completion and operation of the steel mills will be a great technical and organisational achievement. Large numbers of Pakistanis would pick up sophisticated skills. Even now thousands of Pakistanis are working on the site and both their Pakistani and Soviet supervisors are satisfied with the quality of work.

Pakistan Steel Mills is to last one full half century (50 years). But before it goes into full production it is also necessary to develop down-stream industries which would include four to five hundred foundries, light-engineering units and small workshops. It was sometime ago that a working group had been formed to study the setting up of down-stream industries. The policy in this direction will have to be a package of fiscal incentives, technical back-up and modern methodology.

INCOME-TAX PAYERS
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A GRIEVANCE CELL is there in the Central Board of Direct Taxes to attend to your complaints promptly? This cell is functioning under the direct control and supervision of Chairman. He personally acknowledges petitions and ensures prompt redressal of tax-payers' grievances.

If you have any legitimate grievances concerning Income-tax. Wealth-Tax/Gift-Tax, Estate-Duty about undue delays in :

*** GRANT OF REFUND**

*** GIVING EFFECT TO APPELLATE ORDER**

*** CLAIM FOR RECTIFICATION**

*** ADJUSTMENT OF PRE-PAID TAX**

*** COMPLETION OF ASSESSMENT**

*** TRANSFER OF ASSESSMENT RECORD**

Please address your petitions direct to :

Shri Jagdish Chand,
Chairman,
Central Board of Direct Taxes,
Room No. 148, North Block,
Central Secretariat,
New Delhi-110001.

Note: **To facilitate action on your petition please quote your Permanent Account Number alongwith your name and address, assessment year and the circle ward in which assessed.**

Directorate of Inspection
(Research, Statistics, & Public Relations)
Income Tax Department, New Delhi-100 001

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CORPORATE SECTOR

In the market

Wiltech India

Wiltech India Ltd (Registered office: 51-A Richmond Road, Bangalore 560 025) is offering for public subscription at par 17,14,690 equity shares of Rs 10 each, totalling Rs 1.71 crores. Apart from this, 17,75,310 equity shares of Rs 10 each at par totalling Rs 1.78 crores have been reserved for allotment to the promoters of the company. The subscription list, which opened on September 24, will close on October 6 or earlier but not before September 28.

The company was incorporated in October 1979. It has been jointly promoted by the Karnataka State Industrial Investment and Development Corporation Ltd and Asian Cables Corporation Ltd. It is setting up a project at Belagola near Mysore for the manufacture of 150 million double edged blades, 20 million shaving systems, 0.2 million razors and 5 million plastic razor handles. Commercial production is expected to start by June 1982.

The project cost is estimated at Rs 10.30 crores which will be financed by equity capital of Rs 3.50 crores, term loans of Rs 6.45 crores, state development loan of Rs 20 lakhs and Central subsidy of Rs 15 lakhs.

Malwa Cotton Spinning

Malwa Cotton Spinning Mills Ltd (Registered office: 54-56 Sector 17A, Chandigarh-160 017) is offering for public subscription at par 13 lakh equity shares of Rs 10 each totalling Rs 1.30 crores. The subscription list will open on September 28 and close on October 16 or earlier but not before October 1.

The company was incorporated as a public limited company in December 1976. It was promoted by Punjab State Industrial Development Corporation Ltd and Oswal Woollen Mills Ltd. It is setting up a spinning mill at Barnala, district Sangrur in Punjab with a complement of 24,200 spindles for the manufacture of yarn. Production is expected to start by November 1981.

The total cost of the project is estimated at Rs 8.40 crores which will be financed by equity share capital of Rs 3 crores, term loans of Rs 5.25 crores and central cash subsidy of Rs 15 lakhs.

Arvindkumar Nandkumar

Arvindkumar Nandkumar Ltd (Registered office: 30, Kali Krishna Tagore Street, Calcutta-700 070) is offering for public subscription at par 1.75 lakh equity shares of Rs 10 each, totalling Rs 17.50 lakhs. The subscription list, which opened on September 22, will close on October 3. The company was incorporated as a private limited company in August 1973 and was converted into a public limited company in May 1981. It is engaged in the manufacture of PC concrete poles and RCC poles, pipes etc.

Bhutoria Valve Udyog

Bhutoria Valve Udyog Ltd (Registered office: 8-A, Lindsay Street, Calcutta-700 016) is offering for public subscription at par 2.07 lakh equity shares of Rs 10 each totalling Rs 20.70 lakhs. The subscription list which opened on September 23, will close on October 3 or earlier but not before September 26. The company was incorporated as a public limited company in April 1972 for the manufacture of C.I. castings.

Other developments

Chowgule Steamships

Mr V. D. Chowgule, chairman of Chowgule Steamships Ltd, has said that the working for the first five months of the current year was generally good in view of the company having fixed its ships on charter of the last quarter of the financial year. He was cautiously optimistic about the future trend in the freight market which had received a setback in the recent month or two. He pointed out that the World Development Report 1981 said that the recession in the industrialised countries had probably now bottomed out and recovery would begin in late 1981 or 1982. World export growth could reach 5.7 per cent a year in 1980s. He however sounded a warning against being overoptimistic about a big boom in freight market and said that rather he would prefer a steady and reasonable chartered market which would not give opportunity for undue speculative operations which many a time tempt shipowners to become irrational in ordering new ships.

Mr Chowgule called for a positive shipping policy in the context of the Government of India accepting the shipping target of 10 million grt by 1990 as proposed by the Honavar Committee. He traced the role played by the soft loans granted by the Shipping Development Fund Committee on a long-term basis in the growth of our shipping to 5.7 million grt and said that he was disturbed by reports of the present concept of assistance to shipping industry being questioned at some government levels. He pointed out that all maritime countries extended substantial loan assistance at cheaper rate of interest (3.5 per cent per annum), special development allowance/accelerated depreciation to their shipping. "I would sincerely appeal at the highest levels to the Government of India to take a positive view and let the industry know the policy which would hold good over a period of at least another ten years, say up to 1990, so that industry can accordingly take a planned expansion programme and thus help achieve the target set, namely, of acquisition of 10 million grt by 1990."

He wanted the Shipping Ministry not to wait for clearances including those under the MRTP Act and from the SDF Committee before taking final decision on issuing an acquisition licence and said that the executive decisions should be vested in the Shipping and Transport Ministries. He also failed to understand why when the Government had recently decided that a 100 per cent export-oriented industry which earned foreign exchange need not obtain the various clearances, the same procedure should not be made applicable to the shipping industry.

Dalmia Cement (Bharat): Sales spurt

Sales of Dalmia Cement (Bharat) Ltd for the half year ended June 1981 amounted to Rs 15.58 crores compared Rs 9.78 crores for the half year ended June 1980. The net profit after providing Rs 1.03 crores (Rs 33 lakhs) for taxation was Rs 68.14 lakhs (Rs 25.20 lakhs). An amount of Rs 1.04 lakhs (Rs 4.53 lakhs) is transferred to investment allowance reserve. Production of clinker during the half year ended June 1981 was Rs 1.74 lakh tonnes compared to production of 1.81 lakh tonnes during the half year ended June 1980. Production of cement was 2.38 lakh tonnes (2.05 lakh tonnes) and that of dead burnt magnesite was 34,150 tonnes (24,376 tonnes). Production of iron ore was 1.95 lakh tonnes (1.81 lakh tonnes) and that of cashew kernels was 102 tonnes (84 tonnes). The vertical shaft kiln project at Dalmiapuram is expected to be commissioned shortly.

Standard Chartered Bank: Profit up

Standard Chartered Bank Ltd has earned a net profit of £68.9 million for the six months ended June 1981 compared to £50.9 million for the six months ended June 1980 after providing £58.9 million (£61.1 million) for taxation and £11.4 million (£9.3 million) for minority interests. The interim dividend recommended is 13.8 pence per share (12 pence per share).

Svadeshi Mills pays 20 per cent

Sales of the Svadeshi Mills Company Ltd for the year ended December 1980 increased to Rs 22.43 crores from Rs 21.93 crores in the previous year. The net profit after providing Rs 46.63 lakhs (Rs 43.78 lakhs) for depreciation and Rs 46.50 lakhs (Rs 47 lakhs) for taxation was Rs 75.07 lakhs (Rs 60.81 lakhs). The equity dividend recommended for the year under review is 20 per cent (same). An amount of Rs 17 lakhs (Rs 15.50 lakhs) is transferred to investment allowance reserve.

Central India Spinning earns more

Sales of the Central India Spg Wvg & Mfg Co Ltd for the year ended December 1980 declined to Rs 25.40 crores from Rs 25.49 crores in the previous year. The net profit after providing Rs 39.55 lakhs (Rs 34.61 lakhs) for depreciation was Rs 1.29 crores (Rs 1.22 crores). The equity dividend recommended for the year under review is 10 per cent.

Beco Engineering: Dividend doubled

Beco Engineering Company Ltd has reported higher turnover for the year ended December 1980 at Rs 5.18 crores compared to Rs 3.98 crores in the previous year. The net profit after providing Rs 15.96 lakhs (Rs 12.25 lakhs) for depreciation and Rs 16.08 lakhs (Rs 0.04 lakh) for taxation amounted to Rs 32.31 lakhs (Rs 21.78 lakhs). The equity dividend recommended for the year under review is 12 per cent (6 per cent). An amount of Rs 6.70 lakhs (Rs 7.91 lakhs) is transferred to investment allowance reserve and Rs 36.98 lakhs (Rs 17.20 lakhs) to general reserve.

The company has completed the modernisation of its machine tools plant and is now embarking on the modernisation of its foundry at Batala at a cost of about Rs 62 lakhs. It has received diversification licence for manufacturing plano milling machines.

Sandoz (India): Higher turnover

Turnover of Sandoz (India) Ltd for the year ended December 1980 increased to Rs 53.40 crores from Rs 48.60 crores in the previous year. The net profit was Rs 1.13 crores (Rs 1.43 crores). The equity dividend recommended for the year under review is 11.5 per cent payable on the increased capital resulting from the issue of 2:5 bonus shares. An amount of Rs 72.17 lakhs (Rs 1.03 crores) is transferred to general reserve.

Forthcoming company meetings

SEPTEMBER 26 TO OCTOBER 2

Mettur Chemical & Industrial Corpn. Ltd, Mettur Dam, R. S. Salem District 636402. (*September* 26, 11 *a.m.*)

Hind Kitabs Ltd, Commerce Publications Ltd, Manek Mahal, 6th Floor, 90, Veer Nariman Road, Bombay-400 020. (*September* 26, 11 *a.m.*)

Ajit Mills Ltd, Maskati Kapad Market Mahajan Hall, New Cloth Market, Raipur Gate, Ahmedabad-380 002. (*September* 26, 10 *a.m.*)

Poysha Industrial Company Ltd, Walchand Hirachand Hall, Indian Merchants' Chamber Building, Bombay-400 020. (*September* 28, 4 *p.m.*)

Gajra Bevel Gears Ltd, Industrial Area, Agra-Bombay Road, Dewas-455 001. (MP) (*September* 28, 4 *p.m.*)

IPCO Paper Mills Ltd, Sunville Deluxe Pavilion, Dr Annie Besant Road, Worli, Bombay-400 018. (*September* 28, 11 *a.m.*)

Gangappa Paper Mills Ltd, Hotel Asoka, 33, Pantheon Road, Madras-600 008 (*September* 28, 4 *p.m.*)

Ultramarine & Pigments Ltd, Walchand Hirachand Hall, Indian Merchants' Chamber Building, Bombay-400 020. (*September* 28, 11 *a.m.*)

Kamani Metals & Alloys Ltd, Bombay House Auditorium, Bombay House, Homi Mody Street, Bombay-400 023. (*September* 28, 2.30 *p.m.*)

Gramophone Company of India Ltd, Main Hall, Bengal Chamber of Commerce & Industry, Royal Exchange, 6, Netaji Subhas Road, Calcutta-700 001. (*September* 28, 3.30 *p.m.*)

Northbrook Jute Company Ltd, 6, Church Lane, Calcutta-700 001. (*September* 28, 3 *p.m.*)

Jardine Henderson Ltd, 4, Clive Row, Calcutta-700 001. (*September* 28, 3.30 *p.m.*)

Zenith Steel Pipes and Industries Ltd, Rama Watumall Hall, K. C. College Building, Dinshaw Wachha Road, Bombay-400 020. (*September* 29, 4 *p.m.*)

Modern Mills Limited, Sasmira Auditorium, Sasmira, Dr Annie Besant Road, Bombay-400 025. (*September* 29, 3 *p.m.*)

Nirlon Synthetic Fibres & Chemicals Ltd, Birla Matushri Sabhaghar, 19, Sir Vithaldas Thackersey Marg, Bombay-400 020. (*September* 29, 1.30 *p.m.*)

Hind Rectifiers Ltd, Kamalnayan Bajaj Hall, Bajaj Bhavan, 226, Nariman Point, Bombay-400 021. (*September* 29, 4 *p.m.*)

Bharat Steel Tubes Ltd, Chelmsford Club, Raisina Road, New Delhi. (*September* 29, 4 *p.m.*)

Kohinoor Mills Company Ltd, Premises of Kohinoor Mill No. 1, M.M.G.S. Marg, Dadar, Bombay-400 014. (*September* 29, 4.30 *p.m.*)

Caprihans India Ltd, Patkar Hall, SNDT University, Nathibai Thackersey Road, Bombay-400 020. (*September* 30, 12 *p.m.*)

South India Viscose Ltd, Shanmuga Manram, Race Course, Coimbatore-641 018 (*September* 30, 11 *a.m.*)

Assam Petrochemicals Ltd, G.N.B. Road, Gauhati (Assam). (*September* 30, 11 *a.m.*)

Mysore Paper Mills Ltd, Conference Hall, Woodlands Hotel, Sampangi Tank Road, Bangalore-560 025. (*September* 30, 3.30 *p.m.*)

Titaghur Paper Mills Company Ltd, Main Hall, Bengal Chamber of Commerce and Industry, Royal Exchange, 6, Netaji Subhash Road, Calcutta-700 001. (*September* 30, 11 *a.m.*)

General Electrodes and Equipment Ltd, Walchand Hirachand Hall, Indian Merchants' Chamber Building, 76, Veer Nariman Road, Bombay-400 020. (*September* 30, 4 *p.m.*)

Tata-Robins-Fraser Ltd, 11, Station Road, Burma Mines, Jamshedpur-831 007. (*September* 30, 3 *p.m.*)

Raghuvanshi Mills Ltd, M. C. Ghia Hall, Bhogilal Hargovindas Building, 18, K. Dubhash Marg, Bombay-400 023. (September 30, 4 p.m.)

United Breweries Ltd, The Brewery, 24, Grant Road, Bangalore-560 001. (*September* 30, 11.30 *a.m.*)

Gannon Dunkerley & Company Ltd, Chartered Bank Building, Fort, Bombay-400 023. (*September* 30, 12 *p.m.*)

Lynx Machinery Ltd, Cama Hall, 136, Shahid Bhagat Singh Marg, Bombay-400 023. (*September* 30, 3.30 *p.m.*)

Mohan Meakin Ltd, Solan Brewery, Simla Hills, Himachal Pradesh. (*September* 30, 4 *p.m.*)

Financial analysis of operations of non-financial companies

Compiled by Commerce Research Bureau

(Rs lakhs)

Name of the Company	Central Pulp Mills		Orient Paper & Industries		Pudumjee Pulp & Paper Mills		Straw Products		Tribeni Tissues	
Industry Group	Paper & paper products		Paper & paper products		Paper & paper products		Paper & paper products		Paper & paper products	
	Year ended September		Year ended March		Year ended December		Year ended December		Year ended December	
Item	1979	1980	1980	1981	1979	1980	1979	1980	1979	1980
Liabilities (at the end of the year)										
1. Net worth (i+ii)	706.1	661.1	3,476.3	3,667.0	532.0	598.9	1,832.1	2,056.1	1,142.4	1,201.4
(i) Paid-up capital (a+b)	380.3	380.3	752.6	752.6	225.0	225.0	523.3	523.3	635.7	635.7
(a) Equity	299.1	299.1	572.6	572.6	225.0	225.0	420.4	420.4	635.7	635.7
(b) Preference	81.2	81.2	180.0	180.0	—	—	102 9	102.9	—	—
(ii) Reserves	325.8	280.8	2,723.7	2,914.4	307.0	373.9	1,308.8	1,532.8	506.7	565.7
2. Borrowings (i+ii)	1,181.5	1,112.8	48.0	693.0	212.9	358.4	1,817.8	2,151.2	573.4	735.8
(i) Long-term	754.8	680.2	19.4	215.6	148.0	236.6	928.0	1,183.8	135.3	170.9
(ii) Short-term	426.7	432.6	28.6	477.4	64.9	121.8	889.8	967.4	438.1	564.9
3. Non-current liabilities and provisions	—	—	136.5	136.3	17.2	9.3	—	—	—	—
4. Current liabilities and provisions	407.4	437.2	1,111.1	1,199.3	244.9	278.6	615.2	782.7	439.0	444.8
Assets (at the end of the year)										
5. Gross fixed assets	3,326.4	3,363.5	5,252.2	6,601.3	767.9	818.9	4,129.3	4,759.8	1,870.3	2,057.6
6. Less depreciation	1,497.3	1,725.2	3,575.2	3,684.6	283.5	331.6	1,686.5	1,938.0	723.5	820.2
7. Net fixed assets (5—6)	1,829.1	1,638.3	1,677.0	2,916.7	484.4	487.3	2,442.8	2,821.8	1,146.8	1,237.4
8. Current assets (i+ii+iii)	465.9	572.8	2,664.9	2,348.6	469.2	704.8	1,151.5	1,897.6	1,008.0	1,144.6
(i) Inventories	231.9	292.0	1,441.6	1,463.7	268.1	372.7	1,041.4	1,298.4	504.4	608.7
(ii) Receivables and loans and advances	177.5	212.7	1,049.3	745.4	197.1	329.8	482.1	570.8	372.1	490.0
(iii) Others	56.5	68.1	174.0	139.5	4.0	2.0	28.0	28.4	131.9	45.9
9. Other assets	—	—	430.0	430.3	53.4	53.4	270.8	270.6	—	—
Total: Liabilities (1 to 4) or Net assets (7 to 9)	**2,295.0**	**2,211.1**	**4,771.9**	**5,695.6**	**1,007.0**	**1,245.2**	**4,265.1**	**4,990.0**	**2,154.8**	**2,382.0**
Value of production and other income										
10. Sales/income net of excise duty, discounts and selling commission	1,232.2	1,560.5	5,533.7	5,734.6	924.2	1,083.7	3,165.7	3,969.7	1,850.6	1,819.2
11. Increase in stock of finished goods and work in progress	—26.0	68.5	74.0	2.6	—30.9	56.4	151.1	169.2	20.8	14.7
12. Value of production (10+11)	1·206.2	1,629.0	5,607.7	5,737.2	893.3	1,140.1	3,316.8	4,138.9	1,871.4	1,833.9
13. Other income	6.9	9.7	281.3	352.3	9.1	7.9	44.9	48.9	14.0	15.8
Expenditure										
14. Materials, stores and other mfg. expenses	735.3	992.5	3,734.7	3,964.0	452.1	675.1	1,660.5	2,135.5	928.3	923.2
15. Current repairs	22.9	25.2	146.6	153.8	105.2	72.7	21.9	30.1	100.3	102.5
16. Salaries and wages	95.4	111.1	645.7	685.1	92.0	100.6	580.8	624.1	259.1	245.7
17. Welfare expenses	10.5	12.8	55.8	67.0	4.6	5.1	21.8	24.9	21.3	19.9
18. Managerial remuneration	—	—	7.5	6.0	0.4	0.2	0.4	0.7	0.6	0.6
19. Other expenses	67.6	78.6	327.8	348.3	32.0	36.8	368.1	465.2	137.0	135.2
20. Depreciation	224.5	228.4	162.3	138.7	45.7	48.3	205.0	262.2	109.3	97.3
21. Other provisions	—	—	—	—	—	—	—	—	—	—
22. Operating profit (12+13)—(14 to 21)	56.9	190.1	808.6	726.6	170.4	209.2	503.2	645.1	329.5	325.3
23. Interest	198.4	223.2	99.7	176.0	27.4	47.7	210.3	206.1	88.7	94.7
24. Tax provision	—	—	405.0	290.0	52.0	94.3	60.0	121.0	33.5	72.5
25. Profit after tax (22—23—24)	-141.5	-33.1	303.9	260.6	91.0	67.2	232.9	318.0	207.3	158.1
Appropriations										
26. Dividends (i+ii)	—	—	127.2	127.2	23.0	22.5	85.7	94.1	117.6	101.7
(i) Equity	—	—	114.5	114.5	22.5	22.5	75.7	84.1	117.6	101.7
(ii) Preference	—	—	12.7	12.7	0.5	—	10.0	10.0	—	—
27. Profit retained (25—26)	-141.5	-33.1	176.7	133.4	68.0	44.7	147.2	223.9	89.7	56.4
Total: Value of production and other income (12+13) or Expenses and appropriations (14 to 22)	**1,213.1**	**1,638.7**	**5,889.0**	**6,089.5**	**902.4**	**1,148.0**	**3,361.7**	**4,187.8**	**1,885.4**	**1,849.7**
Operational indicators (per cent)										
(a) Net worth/total net assets	30.8	29.9	72.8	64.4	52.8	48.1	43.0	41.2	53.0	50.4
(b) Inventories/net sales	18.8	18.7	26.1	25.5	29.0	34.4	32.9	32.7	27.2	33.5
(c) Operating profit/net sales	4.6	12.2	14.6	12.7	18.4	19.3	15.9	16.3	17.8	17.9
(d) Operating profit/total net assets	2.5	8.6	16.9	12.8	16.9	16.8	11.8	12.9	15.3	13.7
(e) Profit after tax/net worth	..	..	8.7	7.1	17.1	11.2	12.7	15.5	18.1	13.2
(f) Equity earning/equity capital	..	..	50.9	43.3	40.2	29.9	53.0	73.3	32.6	24.9
(g) Equity dividend	—	—	20.0	20.0	10.0	10.0	18.0	20.0	18.5	16.0
(h) Equity dividend coverage. (No. of times)	..	..	2.5	2.2	4.0	3.0	2.9	3.7	1.8	1.6
(i) Paid-up value per equity share (Rs.)	100.00	100.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
(j) Market price of an equity share (Rs.)	N.Q.	N.Q.	41.50	44.50	23.50	23.75	39.50	43.00	23.45	19.90
(k) Gross yield	..	..	4.8	4.5	4.3	4.2	4.6	4.7	7.9	8.0
(l) Gross fixed assets formation	1.2	1.1	13.2	25.7	25.3	6.6	9.7	15.3	4.4	10.0
(m) Debt/equity	1.07:1	1.03:1	0.01:1	0.06:1	0.28:1	0.40:1	0.51:1	0.58:1	0.12:1	0.14:1

NOTES : ..Category not applicable ... Amount/Precentage is negligible —Amount is nil N.Q. Not quoted N.A. Not available
The profit figures shown in the above statement have been calculated by making, wherever necessary, additions or deductions of various items so as to show the true profit pertaining to the particular year on a uniform and comparable basis. Similar adjustments are sometimee made in other itemes also. Totals may not add up due to rounding off.

EQUITIES

Smart rally

Bombay, September 21

After the sustained fall of the past one month, equities staged a smart recovery during the past week on emergence of hectic short-covering and a firm bull grip. Although the improved levels could not be retained till the close of the week on account of scattered precautionary profit-taking, modest-to-handsome gains were widespread. Activity was better and the undertone was hopeful.

The technical position of the market improved considerably following the consistent fall during the past one month. Besides the passing of the Essential Services Maintenance Bill by the Lok Sabha had a tonic effect on equity sentiment as marketmen hoped that this would help in improving industrial production, especially in key sectors. Corporate reports were also better during the week.

Century flared up from the week's low of Rs 802.50 to Rs 830.50 on influential support. With the closing at Rs 824, the scrip recorded a net gain of Rs 18. Standard shot up from Rs 496 to Rs 521. The closing was, however, at Rs 508 on profit-taking. Even so, the scrip gained Rs 12.

Tata Stel firmed up by Rs 17 to Rs 358 on hopes of early sanction for the proposed bonus issue of two-for-five. TELCO spurted by Rs 27 to Rs 606 on informed buying. GE Shipping hardened by Rs 5.25 to Rs 47.75 on hopes good results for the year ended June 1981. Scindia improved by Rs 2.50 to Rs 25 in view of the impending board meeting.

Premier Automobiles shot up by Rs 36 on the announcement of books closure. Marketmen were expecting a reasonable dividend from the company. The other firm features were Bombay Dyeing, ACC, Khatau, Larsen, Tata Chemicals, Hindustan Motors and Gwalior Rayon. Indian Dyestuff was subdued following the chairman's far from encouraging statement about the current year's outlook at the annual general meeting held on September 16.

In the cash section, popular scrips were firm features. GSFC improved by 11 points to Rs 425 on the company's decision to increase the caprolactum prices. Baroda Rayon, Century Enka, Indian Rayon, South India Viscose, Bajaj Auto, Kinetic, MICO, NOCIL, Piramal Steel and IOC recorded fair-to-substantial gains.

THE WEEK'S PRICE RANGE

(Compiled by Commerce Research Bureau)

	Closing quotations 12-9-81	High	Low	Closing quotations 19-9-81
CLEARED SECURITIES	Rs	Rs.	Rs.	Rs.
Textiles				
Ahm. Advances (100)	206.25	207.50	206.25	207.50
Bombay Dyeing (25)	79 00	88.00	79.50	85.00
Central India (50)	55.00	57.00	55.00	57.00
Century (100)	806.00	830.50	802.50	824.00
Dawn (50)	71.00	78.00	71.00	78.00
Elphinston (50)	50.00*	—	—	50.00*
Finlay (100)	105.00	105 00	100.00	100.00
Gokak (100)	205.00	205.00	202.00	205.00
Gwalior Rayon (10)	54.50	59.50	54.25	56.75
Khatau (100)	255.00	270.00	255.00	267.50
Kohinoor (100)	56.00	57.00	53.00	57 00
Morarjee (100)	237.50	246.25	237.50	240 00
National Rayon (100)	350.00	355.00	345.00	345.00
New Great Eastern (100)	96.50*	—	—	96.50*
Phoenix (100)	46.00	—	—	46.00*
Podar (10)	7.00	8.00	7.00	8.00
Shreeniwas (100)	85.00*	—	—	85.00*
Simplex (50)	72.50	72.50	71.50	72.00
Standard (100)	496.00	521.00	496.00	518.00
Svadeshi (100)	168.00	168.00	165.00	168.00
Swan (100)	215.00	—	—	215.00*
Tata Mills (25)	27.00	29.00	27.00	27.50
Electric				
Ahmedabad (100)	92.00	93.50	92.00	93.00
Andhra Valley (100)	114.00	115.00	113.00	115 00
B.Subarban (100)	120.00	120.00	120.00	120.00
Tata Hydro (100)	116.00	116.50	113.00	116.50
Tata Power (100)	116.00	120.00	117.00	119.00
Steel				
Mukand (10)	25.25xd	26.50	24.50	25.75
Tata Steel (100)	341.00	364.50	335.00	358.00
Engineering				
Larsen & Toubro (10)	64 00	70.50	64.00	68.00
Tata Eng. & Loco (100	579.00	620.00	576.00	616 00
S.L.M. Maneklal (100)	170.00	170.00	150.00	155 00
Voltas (100)	235.00	244.00	234.00	236 00
Walchandnagar (100)	192.50	195.00	190.00	190.00
Dyes & Chem				
Amar Dye-Chem (100)	150.00	155.00	145 00	150.00
Indian Dyestuff (100)	218.00	227.00	210.00	210.00
Polychem (50)	69.00	70.00	67.00	70.00
Tata Chemical (10)	55.00	61.00	54.50	59.00
Shipping				
Great Eastern (10)	42.50	50.25	44.50	47 75
Scindia (20)	22 50	25.75	22.75	25.00
Cement				
A.C.C. (100)	139 00	162.00	139.50	147.00
Shree Digvijay (100)	145.00	155.60	145.00	155.00
Sugar				
Maharashtra (50)	49.00	51.00	49.00	51.00
Phaltan (50)	39.00	—	—	39.00*
Miscellaneous				
Bombay Burmah (25)	44 25	45.50	44 00	45.50
Hindustan Motors (10)	22 50	25 25	23.00	25.00
Premier Automobiles (100)	239 00	281.00	248 50	275.00
Pre. Construction (50)	77 00	80 00	77 00	80 00
Sirpur Paper (10)	25 00	29 00	26 75	28.00
Tata Oil (25)	63 00	66 50	63 50	62 50
W. Coast Paper (100)	90 00	100.00	92 50	100 00
Wimco (10)	14.00	14.00	12.50	13.75
NON-CLEARED SECURITIES				
Textiles				
Baroda Rayons (100)	336 00	380 00	356 00	361 50
Century Enka (100)	637 50	660 00	649 00	655 00
Garware Nylons (10)	33 50xd	38 50	33 25	36 00
Gold Mohur (100)	92 00*	—	—	92.00*
Indian Rayon (10)	83 00	92 00	83.25	89 00
J. K. Cotton (10)	16 75	17 75	16 75	17 75
J. K. Synthetics (10)	49 00	53 75	49 50	53 00
Lakshmi Vishnu (100)	58 00	58 00	55 00	57 00
Mafatlal Fine (100)	230 00	231 25	227 50	231 25
Mafatlal Industries (125)	377 50	377 50	373 75	377 50
Modella Woollen (10)	10 00*	10.00	9 50	9 75
Modipon (10)	67 00*	—	—	67 00*
Nirlon (10)	58 00	61.00	57.00	59 00

	Closing quotations 12-9-81	High	Low	Closing quotations 19-9-81
NON-CLEARED SECURITIES	Rs.	Rs.	Rs.	Rs.
Textiles				
Raghuvanshi (100)	162.50*	—	—	162.50*
Raymond Woollen (10)	54.00	59.00	55.00	55.00
Reliance Textile (10)	99.75	103.00	99 00	102 00
S. I. Viscose (100)	240.00	250 00	232.00	250 00
Stretch Fibres (10)	8 25	8.25	7.75	7 75
Swadeshi Polytex (10)	14.75	15.00	14.50	14.75
Electric				
Amalgamated (10)	6.50xd	7.00	7.00	7.00
Surat (100)	93.00	—	—	93.00*
Cement				
Mysore Cement (10)	29 50	30.00	28.50	29.50
Saurashtra Cement (100)	110.00*	—	—	110.00*
Paper				
Andhra Paper (100)	220.00xd	220.00	215.00	215.00
Bhadrachalam (10)	17.50*	—	—	17.50*
Jayant Paper (100)	155.00	—	—	155.00*
Rohit (100)	215.00*	—	—	215.00*
Steel, metals, alloys				
Ennore Foundries (10)	35.50	35.50	34.00	35 00
Ferro Alloys (100)	250.00	270.00	247.50	265 00
Hind Aluminium (10)	45.00	47.50	45.00	46 00
Khandelwal Ferro (100)	130 00	130.00	122.50	127 50
Mahindra Ugine (10)	53.50	56.50	53.00	55.00
Tata Yodogawa (100)	125.00*	125.00	120.00	125.00
Engineering				
Associated Bearings (100)	375.00	385.00	375.00	385.00
Bimetal Bearings (10)	40.00	41.00	40.00	41.00
Blue Star (10)	32.50	34.50	32.50	34.50
Elecon Engineering (100)	420.00	425.00	425.00	425.00
Gujarat Steel Tube (100)	640.00	635.00	630.00	635.00
Hindustan Brown (100)	310.00	—	—	310 00*
Ingersoll-Rand (10)	106.00	117.00	105.00	112 00
Jyoti (100)	225.00	222.50	220.00	222 50
Kamani Eng. (10)	525.00	552.50	523.75	552.50
Kirloskar Cummins (100)	27.50	27.75	27.00	27.50
Kirloskar Oils (10)	47.00	47.00	45.00	47.00
Kirloskar Pneumatic (10)	49.00	56.50	48.50	53 50
Mahindra (10)	68.00	68.00	65.00	65.00
New Standard (100)	122.50	122.50	117 50	117 50
Sandvik Asia (100)	315 00	335.00	312.50	335 00
Vulcan-Laval (10)	33.00	34.50	32.50	34.50
Zenith Steel (10)	45.00xd	48.50	44.50	48.50
Cables & Elec.				
Asian Cables (100)	213 75	211.25	210.00	210 00
Bajaj Electricals (100)	193 75*	—	—	193 75*
Crompton Greaves (100)	351 25	351.75	348.75	348.75
Otis Elevator (10)	54.50*	—	—	54 50*
Siemens India (10)	51.00	59.00	52.00	57.50
Chemicals				
BASF (10)	55.00	—	—	55.00*
Bayer (India) (100)	230 00	235.00	212.50	212 50
Chem & Fibres (10)	20 00	20.50	20.00	20 50
Colour-Chem (100)	197 50	205.00	192.50	192.50
German Remedies (10)	25.75*	25.50	24.50	25 00
Gujarat State Fert. (100)	414 00	440.00	415.00	425.00
Hindustan Lever (10)	42.75	45.00	42 00	45 00
Indian Organic (100)	305.00	310.00	300.00	310.00
National Organic (100)	204.00	215.00	203.00	210.00
Pfizer (10)	24 50	24 75	24.00	24 50
Polyolefins Ind. (100)	287 50	295.00	290.00	290 00
Sandoz (10)	24.00	26.00	23.50	24 50
Synthetics (100)	99 00	102 00	96 00	98 00
Warner-Hindustan (10)	23 50*	23.50	22.00	22.00
Zuari Agro (10)	25.00	25.00	24.00	24.50
Miscellaneous				
Bajaj Auto (100)	1262 50	1460.00	1260.00	1,400.00
Bombay Oxygen (100)	112 00	114 00	111 25	114 00
Cadbury (10)	20 50	20 50	20 00	20.50
Camphor & Allied (100)	22[illegible].00	222 50	220.00	22[illegible].50
Ceat Tyres (100)	190 00	190 00	185 00	185 00
Colgate-Palmolive (10)	138 00	144 00	137.00	140.00
Empire Industries (15)	25 50	26 50	25.50	25 50
Fibre glass (10)	22.00xd	23.00	19.75	22 00
Gammon India (10)	20 25	21 50	19 75	21.50
Hindustan Ferodo (10)	39 50	39 50	38.50	38 50
Hoechst Dyes (10)	25 00	25 75	25.50	25 75
Indian Hotels (10)	82 00	90 00	88 00	90 00
Motor Industries (100)	460 00	486 25	455 00	472 50
Tata-Finlay (10)	12 50	13 75	12 75	13 75

Notes: Figures within brackets indicate the paid-up value of shares. xd—Ex—dividend. cd—Cum-dividend. xr—Ex—right. cr—Cum right.

(a) An asterisk mark after the quotation indicates the closing prices of the last official trading and not of the date indicated in the column

(b) The dash (—) in the columns for 'High' and 'Low' means that no official trading in the share had taken place during the period under report.

Market Gossip

Subsidy for jute goods exports

NEW Delhi has at last decided to grant an export subsidy for hessian which was left out in the first announcement on resumed cash compensatory support made about a week ago. The cash support for hessian this time is 7½ per cent of the f.o.b. value. Previously hessian enjoyed a subsidy of 10 per cent. However unlike in the previous instance the latest subsidy will be valid up to March next. The export of hessian has been so sluggish that by the end of August last the jute mills carried as high a stock as 47,000 tonnes of this commodity in a record total stock of 147,500 tonnes.

Including hessian, seven varieties of jute goods are now being given subsidies. It is expected that the subsidies will make Indian jute goods more competitive in the world market and exports will begin to look up in the near future. There is a feeling in the jute industry circles that the worst in the current recessationary phase is over and the industry may soon turn the corner. The raw jute market where prices have slumped 15-20 per cent below the support price should benefit from business recovery when the Government is helping the jute industry to regain its prosperity with cash compensatory assistance from the public exchequer.

Preference shareholders seek fair deal

AN appeal has been made by Mr R. M. Ramanathan, president, Madras Stock Exchange Ltd, to the companies whose preference shares are listed on the ecognised stock exchanges in India to eview and revise the rate of dividend nd other aspects which determine the nvestment value of preference shares. He leads that such a revision is called for n view of the sea-change which has been aking place in the respective rates of eturn and other terms and conditions attached to the main corporate investments uch as equity shares, debentures and xed deposits.

The rate of interest on debentures as been successively raised from 11 to 2 per cent and again to 13.5 per cent ith an additional one per cent linked to nhanced equity dividends. At present ompanies are accepting fixed deposits ith a rate of interest between 13 and 5 per cent. Equity shareholders have ready benefitted by way of higher dividends, bonus shares and appreciation in the market values. On the other hand, the preference shareholders have been obliged to suffer severe losses on account of low rates of preference dividends fixed decades ago. The predicament of non-redeemable preference shareholders is the worst.

Mr R. M. Ramanathan has put forth several suggestions to give a fair deal to the preference shareholders. He has suggested immediate redemption of non-redeemable debentures. Alternatively, they may be converted into redeemable debentures as has been proposed by The Tata Iron and Steel Company Ltd.

Gold from China?

IT would appear that there is smuggling of gold into India not only from West Asia but also from East Asia. The customs officers have recently seized 16 kg of gold, half of which is of Chinese origin and the other half from other countries in the area. This gold was mostly brought by passengers from Hongkong and this has made the customs authorities take a strict view about the luggages of passengers coming from Hongkong and the countries on the eastern side. The 'green gate' is no longer open to passengers coming from those airports and they have necessarily to pass through the red gate—which means the luggage is compulsorily examined. It is not as if some Chinese gold was not smuggled into India in the past. But what has surprised the customs officials is that the yellow metal comes in bars of big size, does not bear stamp of any known refinery and its purity is also suspect. The customs authorities were also recently reported to have seized gold from Dar-es-Salaam. The quantity is about one kg. The local dealers say that the entry of gold from Dar-es-Salaam was not so far known to them.

Meanwhile, gold has been ruling quietly steady during the last few days. Earlier this month the price had spurted to Rs 1,780 per 10 gm following big demand from south India and shortages of supplies. However, higher rates attracted heavy inflow of contraband gold and demand from south was also reduced. The price, as a result, retreated to Rs 1,730-1,740 per 10 gm. Traders believe that during this month about two tonnes of gold was smuggled into the country. Besides, 29 kg of gold was unloaded by gold bond holders.

The announcement by the Finance Minister in Parliament that further enquiries would be made in connection with the "cornering" of gold in auctions held during the Janata regime by 20 dealers had no impact on the bullion market. This investigation has been suggested by Mr K. R. Puri, who held an enquiry into the gold auctions after the Congress (I) came into power. Some of the leading dealers, who are supposed to have cornered gold, said that they would welcome an enquiry. They said that the Gold Control Authorities, following reports of cornering of gold, at that time had made thorough searches of traders' premises and books and they had found no evidence of cornering. The income tax department too had conducted raids and searches and they could trace no incriminating evidence.

UNCTAD commodities pact

A total of 55 countries has so far signed the international agreement sponsored by the UN Conference on Trade and Development (UNCTAD) to stabilise commodity prices. The fund is for $750 million and is split into two accounts of which the first $400 million is reserved for the financing of reserve stocks operations and the second is earmarked to pay for research and export promotion measures. As many as 18 countries signed the agreement during the two-week conference on aid for the world's poorest countries which ended in Paris on September 14. The UNCTAD has drawn up a list of 18 commodities to be financed from the fund in some form. But many consider that the fund is too small to have much impact on commodities markets.

How commodities moved

By Commerce Research Bureau

(Rs per quintal*)

Commodity/Market		*September 19, 1981*	*A week ago*
Groundnut	(*Rajkot*)	550	550
Rapeseed	(*Kanpur*)	515	515
Sesamum	(*Delhi*)	605	605
Castorseed	(*Kanpur*)	278	283
Linseed	(*Kanpur*)	553	553
Sugar	(*Bombay*) (*a*)	553	554
Cotton	(*Bombay*) (*b*)	4,963	4,913
Jute	(*Calcutta*) (*c*)	240	240
Aluminium	(*Bombay*) (*d*)	1,480	1,480
Copper	(*Bombay*) (*e*)	3,510	3,580
Lead	(*Calcutta*) (*f*)	1,250	1,240
Zinc	(*Calcutta*) (*g*)	1,700	1,700
Gold	(*Bombay*) (*h*)	1,748	1,755
Silver	(*Bombay*) (*i*)	2,725	2,770
Caustic soda	(*Bombay*) (*j*)	610	610
Soda ash	(*Bombay*) (*k*)	235	233

* In terms of 10 gm for gold, kg. for silver and candy for cotton

(a) C-30, (b) CJ-73, (c) W-5, (d) Scrap, (e) Wire coil, (f) Scrap, (g) Hard spelter, (h) Standard, (i) .996, (j) Flakes and (k) Tata

COMMODITIES

Cotton subdued

Bombay, September 21

Subdued trading conditions prevailed in the spot cotton market during the past week. Buying interest was confined to a few lots of better quality cottons of the old crop. The buyers were more keen on ensuring purchases of new crop cotton as and when it starts arriving in the market. This is reflected by the interest shown in forward booking of some cottons like MP Y I and CJ 73. Although Baramati cotton from Maharashtra is said to have been readied for the market, indications are that it would take some more time before it becomes available for sale. Thus, there has as yet been no regular quotation of new crop lots in Maharashtra cotton although it is the third week of September.

The government has not waived in import duty in Pakistani cotton but as indicaetd in these columns in the previous week, there was fresh trouble in regard to the import of Pakistan cotton. The customs department would appear to have refused to exempt imports of Karachi cotton from the payment of import duty. The first consignment is expected to reach Bhavnagar port shortly and the customs people there have been insisting on the payment of duty before clearance.

These and other allied problems about cotton imports would appear to have weighed with the chairman, of the Indian Cotton Mills' Federation Mr K. Rajagopal when he suggested at the 23rd annual general meeting of the federation that the raw material situation could be straightened out if imports were allowed freely.

Mr Rajagopal called upon the Government to broadbase the board of the Cotton Corporation of India and revamp its functioning instead of experimenting with the monopoly cotton procurement scheme. He also under-scored the need for stimulating the growth of finer cottons by suitable readjustment of the duty structure.

Reports from Madras indicate that although handloom exports during the current year had been affected by the soaring prices and inadequate supplies of yarn, the export target of Rs 377 crores for the year would be hit thanks to the Tamil Nadu Government arranging through the Southern India Millowners' Association supply of yarn so that the existing contracts could be fulfilled.

Inaugurating a two-day seminar on rotor spinning in New Delhi, Mr Pranab Kumar Mukherjee, Union Commerce Minister, commended the sponsors of the seminar on the selection of theme and added that the open-end spinning system, with its emphasis on the productive use of waste, needed special attention especially as the cotton textile industry was currently passing through a difficult phase on account of the non-availability of the right kind of cotton at reasonable prices. Rotor spinning could meet the challenge of converting wastes into raw materials. The Government's soft loan scheme to provide funds for modernisation was not enough since it was the scientists' research that made modernisation meaningful for the industry, the Minister added.

The following has been the trend of prices of some of the leading varieties of cotton :

(Rs. per candy)

	September 18	August 11
Kalyan	4,660-4,750	4,650-4,800
Saurashtra CO2	4,800-5,000	4,800-5,050
Shankar 4	5,700-6,060	5,760-6,100
Maharashtra H 4	5,450-5,600	5,450-6,000
Maharashtra Varalaxmi	5,325-5,425	5,325-5,425
MP H4	5,300-5,450	5,300-5,450
MP Y 1*	5,000-5,050	5,000-5,050
MP 1007	5,100-6,200	5,150-5,250
MCU 5 Guntur	5,900-6,050	5,900-6,100
CJ 73*	4,725-4,050	..

Yarn declines

Bombay, September 21

A declining trend was noticed in the local yarn market. The prices of 120D NRC, 150D CR, 120D CR and 150D acetate were quoted lower at Rs 53.96, Rs 51.48, Rs 54.23 and Rs 47.62 against Rs 54.38, Rs 51.76, Rs 54.56 and Rs 48.46 respectively in the preceding week. The prices of 150D NRC and 100D SIV, however, remained unchanged at Rs 52.18 and Rs 61.67 respectively.

Jute goods dull despite Central relief

Calcutta, September 14

It is reported from New Delhi that half a dozen jute goods constructions may qualify for cash aid ranging from 7.5 per cent to 12.5 per cent (FOB) value of exports and a formal decision is likely soon. The rates of aid will be in force till March 31, 1982. The reintroduction of the cash aid scheme comes close on the heels of the statements recently made by the Commerce Minister, Mr Pranab Mukherjee in Parliament and the Textile Secretary, Mr Saran Singh, in Calcutta on the subject earlier.

The statements have admitted of huge losses on exports suffered by jute mills—Rs 2,707 a tonne on carpet backing cloth, Rs 1,430 at tonne on hessian and Rs 857 a tonne on sacking.

The jute industry has welcomed the relief which has been sanctioned since by the Centre. The cash compensatory support to the export of certain items has been given with the objective of enhancing the competitive strength of domestic products in the international markets. Carpet backing cloth has qualified for 7.5 per cent, decorative fabrics 10 per cent, yarn and twine 7.5 per cent and cotton bagging 12.5 per cent.

It is expected that export earnings from jute will, therefore, be higher at Rs 400 crores during the current financial year, compared to Rs 327.42 crores in 1980-81. Exports of Indian products have been declining since the beginning of 1980 owing to fierce competition from synthetics and Bangladesh products in the overseas markets. What is worse is that the unit price realisation has also declined sharply. As a result, the industry is stated to be losing more than Rs 10 crores a month.

The happy development, meanwhile, has been the entry of the Soviet Union into the Indian market for nearly 13,000 tonnes of hessian. The price is stated to be Rs 154 per 100 yards. This Russian purchase has been reflected in modest hardening of prices of goods in the Calcutta market. Russia has so far bought 113,000 tonnes of jute goods during 1981-82. The Soviet Union, jute interests feel, will have to buy further quantities if the total amount as provided in the trade agreement between India and Russia is to be completed. The industry feels relieved because the Russian, purchase will reduce the large inventory which mills had to carry at the end of last July.

As for the fibre, the market is dull because mills are not in a position to absorb jute owing to the strained financial position. The Jute Corporation of India has not yet been able to activate its buying. In the meantime, arrival of raw jute from the new crop is strengthening. Unless the JCI begins buying in right earnest, the hardship to growers will aggravate. In any case cultivators may be obliged to dispose of fibre at a discount to collect cash for the forthcoming festive season.

The chairman and managing director of JCI has said that the corporation would mop up 21 lakh bales of fibre from the current season's estimated crop of about 75 lakh to 78 lakh bales under its price support programme. For this purpose the machinery had been strengthened and financial provision made, he said, adding that 30 additional purchase centres had been opened in West Bengal this year.

Groundnut oil scales new high

Bombay, September 21

Groundnut oil prices scaled an all-time high of Rs 165.36 per 10 kg on September 17 and maintained the level till the end of the week, indicating a net Jump of Rs 8.32 from the preceding week. Incidentally,

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The Calcutta Electric Supply Corporation (India) Limited

(Concluded from page 572)

WBSEB as well as increases in other operating costs such as interest charges.

Discussions with the Unions on a fresh wage agreement have been satisfactorily concluded and the Memorandum of Settlement is being implemented in a spirit of reciprocity and mutuality of interests.

Management development programmes, both in-company as well as external and the training of engineers and supervisory staff for the proposed Titagarh Generating Station were continued throughout the year.

N.B.—This statement does not purport to be a report of the proceedings of the Annual General Meeting.

this was the voluntary ceiling price. The firmness was attributed to local shortage and the uncertain outlook for the new crop groundnut.

The price had started falling sharply since the imposition of the voluntary ceiling in the middle of August and had come down to as low as Rs 150 early this month. The market, however, rebounded during the past two weeks on poor flow of oil from the producing centres.

Groundnut also hardened on account of uncertain outlook for the new crop. Karad bold, Saurashtra bold and Saurashtra quality improved by Rs 7 each to Rs 637, Rs 642 and Rs 647 per 100 kg respectively.

In view of the hardening tendency in groundnut oil, soyabean gained Rs 2.92 at Rs 135 and RBD Rs 2.34 at Rs 116.48 per 10 kg among the imported oils. Palmoleine, however, remained easy and the price slipped back by Rs 3.12 to Rs 137 per 10 kg on increased supplies.

Castorseed and its oils were subdued on lack of export inquiries, while sellers were active. Madras small and Kanpur bold yielded Rs 10 each at Rs 308 and Rs 300 per 100 kg. Castor commercial oil lost 50 paise at Rs 68 and BSS oil 75 paise at Rs 73 per 10 kg.

Linseed spurted in sympathy with the groundnut oil. Linseed bold jumped by Rs 45 to Rs 575 per 100 kg while its oil moved up by Rs 1.04 to Rs 130 per 10 kg.

Among cakes, groundnut expeller, de-oil and cottonseed rose by Rs 25 each to Rs 1,875, Rs 1,525 and Rs 1,650 per tonne.

Comparative prices in rupees per quintal of seeds and per 10 kg of oils:

	19-9-81	12-9-81
G. nut Karad bold	637.00	630.00
G. nut oil	165.36	157.04
Cast. Md. Sm.	308.00	318.00
Cast. oil com.	68.00	68.50
Cast oil BSS	73.00	73.75
Linseed bold	575.00	530.00
Linseed oil	130.00	128.96

Tea : Good demand for CTCs

Calcutta, September 14

At the weekly leaf tea auctions in Calcutta the total offerings of 27,866 packages of CTC teas met with good demand. Dooars brokens met with good demand from the Punjab and Gujarat buyers and sold at firm to dearer rates. The major blenders also lent good support. The USSR continued to operate for the grainy better descriptions. Assam brokens met with good inquiry from the major blenders and the Gujarat buyers. There was

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JUGGILAL KAMLAPAT JUTE MILLS CO. LIMITED

KAMLA TOWER, KANPUR

NOTICE

IT is hereby notified for information of the Public that Juggilal Kamlapat Jute Mills Co. Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of a new undertaking for production of 36,000 M.T. per annum capacity Asbestos Cement, corrugated, semi-corrugated, flat sheets, asbestos pipes and accessories etc. Other particulars of the proposed new undertaking are as under :—

1) Name of the proposed Undertaking	Juggilal Kamlapat Jute Mills Co. Limited (Asbestos Cement Products Division)
2) Name of the person (s) or authority/authorities proposing to establish the new undertaking. Whether it is a body corporate, furnish details of its management structure together with those of proposed undertaking	Juggilal Kamlapat Jute Mills Co. Limited, public Limited Company managed by Board of Directors.
3) Capital structure of the applicant person or authority and of the proposed undertaking	The capital structure of the applicant company as on 31.7.1981 is as under.

AUTHORISED CAPITAL :

			(Rs in lakhs)
25,000	4½%	Income Tax Free cumulative preference shares of Rs. 100/- each	25.00
25,000	6%	Income Tax Free cumulative preference shares of Rs. 100/- each	25.00
7,50,000		Equity shares of Rs. 10/- each.	75.00
			125.00

PAID UP CAPITAL :

5,000	4½%	Income Tax Free cumulative preference shares of Rs.100/- each.	5.00
5,000	6%	Income Tax Free cumulative preference shares of Rs. 100/- each.	5.00
4,87.500		Equity shares of Rs. 10/- each.	48.75
			58.75

The proposed undertaking will be a division of the applicant company and, therefore, will not have separate capital structure.

4) Proposed location of the new undertaking	In any backward district of M. P.
5) Brief outline of the cost of project the scheme and sources of finance.	PROJECT COST :

(i) Land	Rs. 5 Lacs
(ii) Building	Rs. 110 Lacs
(iii) Machinery	
Indigenous	Rs. 210 Lacs
Imported	Rs. 200 Lacs
(iv) Working capitals	Rs. 50 Lacs
(v) Pre-operating expenses	Rs. 25 Lacs
	Rs. 600 Lacs.

SOURCE OF FINANCE :

(i) Rs. 142 lacs from internal sources
(ii) Rs. 283 lacks borrowings from Banks and financial Institutions.
(iii) Rs. 175 lacs Deferred payment from Macinery Suppliers/foreign exchange loans.

Rs. 600 lacs.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Reg. Osfice, Kamla Tower, Kanpur
Dated : 11th September, 1981.

FOR **JUGGILAL KAMPLAPAT JUTE MILLS CO. LIMITED**
Sd/-
(P.M. DAVE)
Secretary

N.B. : This Supersedes earlier Notice published in this regard.

The Travancore Electro-Chemical Industries Limited

NOTICE

It is hereby notified for the information of the public that The Travancore Electro-Chemical Industries Limited proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under Sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969 for approval for the establishment of new undertaking for the production, supply, distribution or control of 5000 MT per annum of ELECTRICALLY CALCINED ANTHRACITE COKE, other particulars of the proposed new undertaing are as under :

(i)	Name of the proposed undertaking :	THE TRAVANCORE ELECTRO-CHEMICAL INDUSTRIES LIMITED.	
(ii)	Name of the persons or authority/authorities proposing to establish the new undertaking, where it is a body corporate, furnish details of its Management structure together with those of the proposed undertaking	The Travancore Electro-Chemical Industries Limited, which is managed by Managing Direcrors under the supervision, direction and control of the Board of Directors, namely: Shri Madhav S. Bhandarkar Shri Arvindprasad R. Mahadevia, Shri Jayant J. Mehta Shri N.K. Purushothaman (Nominee, Govt. of Kerala) Shri S. Peer Mohammed (Nominee, The Kerala State Industrial Development Corpn. Limited) Shri Shreekrishna Somani—Managing Director—Shri Shriniwas B. Somani (Jt. Managing Director) The new undertaking will be managed by the Managing Directors under the supervision, Direction, and control of the Board of Directors.	
(iii)	Capital structure of the applicant person or authority and of the proposed undertaking **SHARE CAPITAL :** **Authorised Capital :**		
	4,50,000 Equity Shares of Rs. 100/- each	4,50,00.000	
	50,000 Cumulative Preference Shares of Rs.100/-each	50,00 000	5,00.00,000
	Issued, subscribed and Paid-up Capital :		
	1,86,660 Equity Shares of Rs.100/-each (of the above, 1000 shares were allotted as fully paid-up pursuant to a contract without payment being received in cash and 81,660 Equity Shares have been allotted as fully paid-up Bonus shares by capitalising General Reserve	1,86,66,000	
	6000 9.5% Redeemable cumulative preference Shares of Rs.100/-each	6,00,000	1,92,66,000
(iv)	Proposed location of the new undertaking	Aleppey (Kerala)	
(v)	Brief outline of the cost of project, the scheme and source of finance	Estimated cost of the project Rs. 83 lacs. The project is intended to be financed partly from our own resources and partly from borrowings from State Industrial Development Corporation or Banks.	

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice.

Dated this 15th day of Sept., 1981
Registered Office :
Chingavanam—686531
Kerala State.
Administrative Office :
Empire House, 3rd Floor,
214, D.N. Rd. Bombay-400001.

For THE TRAVANCORE
ELECTRO-CHEMICAL
INDUSTRIES LIMITED.,
Sd/-
H.P.VYAS
CHIEF EXECUTIVE

selective inquiry from the local buyers and the Gulf for the better liquoring lines.

The market for fannings was similar to that of brokens. The ARE was fairly active with good support from the major blenders. There was some inquiry from the UK shippers. The internal buyers operated selectively.

The 9,956 packages of Darjeeling teas offered met with good demand. Whole leaf grades continued to be absorbed by the USSR with selective inquiry from the other traditional exporters at around last levels. Bolder and stalkier varieties were taken by one of the blenders at last levels. Brokens met with inquiry from the USSR as well as the UK and the internal buyers at firm to occasionally dearer rates. Fannings followed a similar trend being taken by the UK and the local dealers.

The 61,540 packages of orthodox tea offered met with better demand. Orthodox brokens met with good demand and sold at fully firm rates. The USSR was active with selective support from Poland and the Gulf.

Mixed trend in grains

Bombay, September 21

A mixed trend featured trading in food grains in the local market.

In cereals, wheat (superior) ruled steady at Rs 270-295 per quintal. The undertone was hesitant. The Saurashtra variety eased by Rs 6 to Rs 205-228 per quintal because of good inflow of about 2,500 bags per day. Sellers were active but demand was at a low ebb.

Activity in rice was limited. Demand was slack. Sellers were reserved because of poor arrivals at the producing centres. The Basmati variety was quoted steady at Rs 500-700 per quintal. Export demand was slack. The Surti kolam variety was quoted steady at Rs 340-400 per quintal.

In coarse grains, a steady trend was evident. Prices ruled steady. Receipts were poor. Jowar was traded at Rs 190-235 per quintal, bajra at Rs 190-250 per quintal and maize at Rs 185-190 per quintal.

Among pulses, gram hardened by Rs 3 at Rs 390-411 per quintal. Masoor dal showed a nominal increase of Rs 3 per quintal over the week to Rs 490-495 per quintal. Moong (chumki) receded by Rs 25 per quintal to Rs 335-425 per quintal on account of pressure of supply. Inflow of new moong crop was good. Tur dal and urad (Khandesh) maintained last week's levels of Rs 450-575 per quintal and Rs 310-315 per quintal respectively.

Sugar quiet

Bombay, September 21

Sugar prices in the local market moved within a narrow range. The price of sugar C-30 grade eased by a rupee to Rs 545-560 per quintal. This was attributed to bearish advices from producing centres. The activity was maintained on sustained demand. The undertone was steady. The sugar stock with the city dealers dropped from 3,354 bags to 2,477 bags at the close of the current week. The price of C-30 grade as on September 19, 1981 was lower by Rs 297 per quintal than on the corresponding date a year ago.

The co-operatives were anxious sellers in view of the larger quota released for the month. The State Co-operative factories quoted both grades at around Rs 530-535 per quintal as compared to the opening levels of Rs 520-525 per quintal.

The Khandsari stock dropped from 603 bags in the preceding week to 396 bags at the close of the week. Prices were quoted in the range of Rs 400-500 per quintal for inferior and superior grades.

Gold and silver decline

Bombay, September 21

Both gold and silver recorded a fall in the Bombay bullion market during the past week.

Standard mint gold which opened at Rs 1,760 per 10 gms closed at Rs 1,748 per 10 gms. Ready silver (.999 fineness) opened at Rs 2,765 per kg and gradually drifted to close at Rs 2,725 per kg.

Money easy

Bombay, September 21

Conditions were easy in the Bombay short-term money market during the past week. Both notified and commercial funds which opened at ten per cent declined sharply to five per cent on September 17. However, the interest rates recovered to 9.5 per cent on September 19, before closing at nine per cent.

Bank credit, aggregate deposits expand

Bombay, September 21

Bank credit of scheduled commercial banks expanded by Rs 19.38 crores to Rs 26,783.75 crores during the week ended September 11, 1981. Aggregate deposits increased by Rs 48.79 crores to Rs 41,121.90 crores. The balances with the Reserve Bank of India (RBI) increased by Rs 277.2 crores to Rs 5,031.56 crores and their borrowings from the RBI increased by Rs 10.47 crores to Rs 585.68 crores.

SHARES AND DEBENTURES QUOTATIONS AS ON 30-6-1981

Abbreviations and notes:—P.O.=Preferred Ordinary shares, N=Nominal quotations c.d.=um-Dividend, x.d=Ex-Dividend, c.r.—Cum-Right x.r.=Ex-Right, ...=Not available, n.a.=Not applicable

Shares: If a company has different classes of shares—as for example 'A' shares and 'B' shares—These are indicated by the same letters 'A' and 'B' under the columns 'Paid-up Ordinary Capital' nd Paid-up per share'.

Accounts:—Figures in the 'Accounts Closed' column represent the months of the year in which he respective companies close their accounts. 6 and 12 for instance, indicate the months of June and December respectively. The information on paid-up capital, reserves, gross block, depreciation and profit/loss carried forward relates to the latest accounting year for which the information on dividend per ordinary share is given.

Reserves include general and other reserves and all other funds which a company may have excluding depreciation fund, reserves for tax liability and provident fund.

Gross block represents actual cost of land, buildings, machinery and all other items on which depreciation is allowed less sales, if any and stands for the gross figures except where otherwise indicated Figures in brackets given below gross block represent the values of work-in-progress included in gross block on which depreciation is not provided

ORDINARY SHARES

BOMBAY

COTTON TEXTILES

In lakhs of rupees					Number installed		Company	Latest available Quotation	Paid-up per share	Dividend per ordinary share				Accounts closed
aid-up rdinary apital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward	Spindles	Looms		(Rs.)	(Rs.)	1977 (Rs.)	1978 (Rs.)	1979 (Rs.)	1980 (Rs.)	
222.67	490.65	1,635.45 (23.86)	765.33	23.91	60,724	1,196	Ahmedabad Advance Mill Ltd.	240.00	100	16.00	Nil	25.00*	20.00	3
70.00	122.37	430.02	233.17	0.05	36.280		Arunoday Mills Ltd.	13.75	10	1.50	2.00	2.50		12
040.86	1,573.06	6 489.32 (212.67)	2;922.12	0.51	2,21,288	3,028	Bombay Dyeing & Mfg. Co. Ltd. ...	95.50	25	na.	5.00*	5.00	3.50	3
13.17	13.45	308.53	170.05	—971.28	48,912	840	Bradbury Mills Ltd.	2.00	50	Nil	Nil	Nil	Nil	3
128.44	74.75	1.216.01 (102.71)	615.74	18.36	1,10,500	2,140	Central India Spg. Wvg. & Mfg. Company Ltd ...	69.00	50	Nil	Nil	Nil	5.00	12
596.97	7 704.90	11,782.78 (372.01)	4,987.96	Nil	1,36944	3,074	Century Spg & Mfg Co Ltd. ...	811.00	100	23.00	26.00	26.00	20.00	12
94.50	203.95	619.11	320.73	6.78	56,040	Nil	Dawn Mills Company Ltd.	76.00	50	6.00	6.00	5.00	6.00	6
29.98	11.36	289.28	229.69	—243.61	51,956	935	Elphinstone Spg. & Wvg. Mills Company Ltd. ...	50.00	50	Nil				12
120.00	48.76	731.50 (2.13)	519.14	34.59	72,668	958	Finlay Mills Ltd.	122.50	100	n.a.	Nil**	Nil	Nil	6
50.00	Nil	410.25	174.96	—361.33	38,787	876	Gaekwar Mills Ltd.	62.50	100	Nil	Nil	n.a.	Nil**	6
326.14	615.10	1,124.34 (29.00)	673.40	Nil	90,068	27	Gokak Patel Volkart Ltd.	214.00	100	16.00	22.00	22.00	22.00	12
120.00	9.69	440.93	334.02	—52.34	66,844	1,142	Gold Mohur Mills Ltd.	98.00	100	n.a.	Nil**	Nil	Nil	6
308.00	509.84	1,900.16	991.28	28.01	1,78,020	3,630	Hindoostan Spg. & Wvg. Mills Ltd.	442.50	250	Nil	Nil	20.00	25.00	3
60.45	268.82	793.24 (6.64)	518.44	0.07	69,820	1,416	Hukamchand Mills Ltd.	100.00	100	6.00	n.a.	6.00*	6.00	3
69.93	155.45	404.23	203.19	6.78	0,736	511	Jam Shri Ranjitsinghi Spg. & Wvg. Mills Co Ltd.	1,100.00	1000	100.00	150.00	150.00	100.00	12
695.48	1,648.15	3,983.37 (113.45)	2,860.97	Nil	71,704	1,811	Jiyajeerao Cotton Mills Ltd. ...	25.75	10	0.90	1.00	1.00	1.00	3
125.00	290.40	1,304.16	872.79	Nil	41,944	987	JK Cotton Spg. & Wvg. Mills Ltd.	22.00	10	Nil	Nil	1.00		12
336.66	411.80	1723.78 (42.29)	1,219.94	0.03	1,30,932	1,256	Khatau Makanji Spg. & Wvg., Company Ltd.	260.00	100	12.00	16.00	12.00	12.00	6
200.00	29.11	1,275.98 (42 80)	672.78	—2,422.70	1,30,200	1,960	Kohinoor Mills Co. Ltd.	64.00	100	Nil	Nil	Nil	Nil	3
89.60	48.25	1,139.91 (12.82)	667.28	—84.07	1,06,096	2,604	Laxmi Vishnu Textile Mills Ltd. ...	60.00	100	Nil	Nil	Nil	Nil	12
163.15	977.54	4,470.24 (188.19)	2,330.64	Nil	3,32,672	1.511	Madura Coats Ltd.	19.00	10	1.00	1.00	1.50	2.00	6
486.00	1,097.72	3,541.43 (16.45)	1 975.40	17.29	1,61,316	2,800	Mafatlal Fine Spg. & Mfg. Co. Ltd. ...	265.00	100	17.00	17.00	17.00	17.00	3
810.00	1,568.49	3,267.36 (194.54)	1,758.54	8.56	1,32,228	2,168	Mafatlal Industries Ltd.	402.50	125	22.00	22.00	22.00	22.00	3
144.07	63.56	606.48	357.68	—17.11	61,196	Nil	Modern Mills Ltd.	50.50	50	n.a.	Nil*	Nil	Nil	3
280.31	594.57	2,140.94	813.06	Nil	1,51,088	2 848	Morarjee Goculdas Spg. & Wvg. Company Ltd. ...	272.50	100	14.00	16.00	20.00	20.00	6
42.00	153.38	507.05	202.70	15.63	32,052	600	Navsari Cotton & Silk Mills Ltd. ...	210.00	100	Nil	8.00	12.00	15.00	12
90.00	168.96	719.60 (0.91)	346.96	Nil	56,280	623	New City of Bombay Mfg. Co. Ltd.	135.00	100	n.a.	12.00**	15.00	15.00	12
92.83	237.69	976.96	472.34	Nil	59,564	1,042	New Great Eastern Spg. & Wvg. Company Ltd.	100.00	100	12.00	12.00	12.00	10.00	12
20.00	31.70	423.40	280.57	—512.36	14,836	1,218	Phoenix Mills Ltd.	46.50	100	Nil	Nil	Nil	Nil	3
76.50	123.43	376.25 (0.49)	61.61	0.04	56,360	1,021	Piramal Spg. & Wvg. Mills Ltd. ...	28.00	10	1.20	Nil	1.50†	1.50	6
43.00	234.40	1,028.33	459.93	3.70	75,040	930	Podar Mills Ltd.	8.75	10	Nil	Nil	Nil	Nil	12
23.60	130.31	544.97 (25.09)	183.48	—87.78	25,088	Nil	Poddar Projects Ltd.	3.24	10	Nil	Nil	Nil		6
45.00	93.13	465.91	333.49	0.02	55.140	176	Raghuvanshi Mills Ltd., ...	162.50	100	6.00	12.00	15.00	15.00	3
56.42	182.55	731.03	310.92	0.11	37,336	610	Raja Bahadur Motilal Poona Mills Ltd. ...	162.50	100	10.00	12.00	15.00	15.00	12
33.00	—42.57	1,162.42	289.02	Nil	24,352	Nil	Rajprakash Spg. Mills Ltd. ...	N.Q.	10	Nil	Nil	Nil	Nil	5
32.00	235.34	762.29	443.96	0.04	29,992	613	Ruby Mills Ltd.	60.00	25	3.00	3.00	3.00	3.75	3
10.00	151.56	1,037.95 (8.60)	7,414.41	—45.74	1,03,828	1,578	Shreeniwas Cotton Mills Ltd. ...	85.00	100	Nil	Nil	Nil		12
60.00	178.66	1,072.94	882.67	--380.65	1,22,576	1,449	Shree Ram Mills Ltd.	84.25	100	Nil	Nil	Nil	Nil	12
74.64	307.23	1,144.55 (3.57)	522.88	0.01	57,224	760	Simplex Mills Co. Ltd.	73.50	50	7.00	7.00	7.00	8.00	6
46.82	1,714.83	5,266.35 (10.86)	2789.45	125.00	1,18,376	2,100	Standard Mills Company Ltd. ...	670.00	100	20.00	20.00	20.00	22.00	3
51.25	369.71	1,250.42 (15.22)	703.57	16.99	91,360	2,252	Svadeshi Mills Company Ltd. ...	175.00	100	20.00	20.00	20.00	20.00	12
17.50	468.23	1,637.05	×26.40	Nil	2,04,946	2,628	Swadeshi Cotton Mills Co. Ltd. ...	12.00N	10	Nil	Nil	Nil		3
52.00	693.44	1632.76	610.84	24.73	90,324	1,935	Swan Mills Ltd.	245.00	100	5.00	8.00	15.00	15.00	12
20.22	42.84	1,386.33 (116.12)	725.06	– 274.88	91,552	1,939	Tata Mills Ltd	29.00	25	Nil	Nil	Nil	Nil	9
78.35	316.27	612.44	823.77	16.32	52,016	1.008	Victoria Mills Ltd.	400.00	100	20.00	21.00	25.00	25.00	12

* For 15 months period × For 9 months period —= Indicates loss carried forward

** For 18 months period

OTHER TEXTILES

In lakhs of rupees					Company	Latest available Quotation	Paid-up per share	Dividend per Ordinary share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward		(Rs.)	(Rs.)	1977 (Rs.)	1978 (Rs.)	1979 (Rs.)	1980 (Rs.)	
35.00	—23.68	215.31	160.59	Nil	Ambika Silk Mills Co. Ltd.	90.00	100	Nil	Nil	Nil		12
759.59	1,345.47	1,341.93 (46.08)	1,853.60	2.01	Baroda Rayon Corporation Ltd.	367.00	100	10.00	12.00	13.00	15.00	12
527.34	1,085.16	2,059.30	899.52	Nil	Century Enka Ltd.	1,100.00	100	18.00	18.00	22.00	22.00	9
648.00	743.21	3,173.45 (265.87)	1,214.40	0.08	Garware Nylons Ltd.	39.50	10	1.50	1.50	1.50	1.50	3
1,783.75	10,313.01	16,744.91 (306.63)	7,457.21	Nil	Gwalior Rayon Silk Mfg. & (Wvg.) Co. Ltd.	69.25	10	1.75	1.75	2.00	2.00	3
437.71	1,162.46	2,747.26 (166.86)	1,459.93	Nil	Indian Rayon Corporation Ltd.	84.00	100	7.50	12.50	15.00	15.00	6
1,500.00	3,877.83	11,271.61 (711.24)	4,342.06	Nil	J. K. Synthetics Ltd.	57.50	10	1.50	1.80	1.80		12
91.00	66.26	395.17 (1.23)	252.54	2.18	Modella Woollen Ltd.	10.00	10	1.20	Nil	0.75		12
596.53	1,584.21	4,747.02 (144.01)	3,078.56	Nil	National Rayon Corporation Ltd.	400.00	100	Nil	10.00	25.00	25.00	12
697.50	1,739.87	5,718.20 (399.16)	2,620.96	0.03	Nirlon Synthetic Fibres & Chemicals Ltd. ...	76.00	10	1.80	2.00	2.25	2.25	3
25.00	33.37	160.73	109.79	9.76	Podar Silks & Synthetics Ltd.	8.00	10	Nil	0.80	1.00	1.20	12
403.20	956.44	3,214.85 (164.34)	1,081.83	55.78	Raymond Woollen Mills Ltd.	44.00	10	1.50	1.20	1.20	1.50	3
1,206.23	1,939.18	7,370.61 (126.24)	1,701.64	3.86	Reliance Textile Industries Ltd.	101.75	10	n.a.	2.75*	2.50	2.50	12
83.88	289.37	686.74 (78.72)	280.82	Nil	Shree Digvijay Woollen Mills Ltd.	36.00xr	10	2.00	2.50	2.50	2.50	3
80.00	281.67	769.19	226.91	Nil	Shri Dinesh Mills Ltd.	350.00	100	12.00	14.00	14.00		12
149.51	17.52	568.97 (356.25)	52.48	Nil	Stretch Fibres (India) Ltd.	9.00	10	Nil	Nil	Nil	Nil	3
					INVESTMENT							
2,475.00	3,414.05	276.53 (58.42)	6,095.88A	23.65	Industrial Credit & Investment Corporation of India Ltd.	93.00	100	12.00	12.00	13.00	13.00	12
187.24	276.72	3.32	724.07A	71.70	Investment Corporation of India Ltd. ...	140.00	100	16.00	12.00	20.00	20.00	3
					ELECTRIC							
874.77	1,505.07	9,315.91 (290.14)	2,480.74	20.10	Ahmedabad Electricity Co. Ltd.	83.00	100	12.50	12.50	12.50	12.50	3
138.83	94.59	152.16	43.77	1.42	Amalgamated Electricity Company Ltd. ...	9.50	10	1.40	0.70	0.60		3
370.05	846.16	2,732.80 (1,175.90)	1,261.53	39.11	Andhra Valley Power Supply Co. Ltd. ...	128.00	100	13.00	13.00	13.00	15.00	3
438.88	2,351.84	5,558.49 (273.95)	1,258.02	0.04	Bombay Suburban Electricity Supply Co. Ltd.	113.00	100	15.00	16.00	18.00	15.00	3
129.19	415.11	1,397.03 (10.72)	338.87	0.05	Surat Electricity Co. Ltd.	95.00	100	14.00	14.00	14.00	14.00	3
286.09	724.88	1,978.21 (789.23)	927.74	33.11	Tata Hydro-Electric Power Supply Co. Ltd....	128.50	100	13.00	13.00	13.00	15.00	3
680.28	1,872.25	5,757.18 (569.55)	2,093.24	75.25	Tata Power Company Ltd.	129.00	100	13.00	13.00	13.00	15.00	3
					CEMENT							
3,323.12	1,556.80	17,040.24 (1,379.23)	8,064.62	396.07	Associated Cement Companies Ltd.	201.50	100	15.00	15.00	16.00	10.00	7
100.24	27.73	478.58 (24.17)	261.03	Nil	Bagalkot Udyog Ltd	6.50	10	Nil	Nil	Nil		6
400.00	333.18	1,276.75 (20.79)	714.19	Nil	Saurashtra Cement & Chemical Industries Ltd.	140.00	100	10.00	12.00	10.00	10.00	6
299.26	783.42	1,917.00 (15.50)	1,209.80	4.70	Shree Digvijay Cement Co. Ltd.	163.00	100	14.00	14.00	15.00	15.00	12
					PAPER AND HARDBOARDS							
450.00	1,094.00	3,365.06 (398.11)	1,770.76	4.90	Andhra Pradesh Paper Mills Ltd.	245.00	100	15.00	18.00	18.00	17.00	6
69.96	229.89	628.70	169.39	5.32	Anil Hardboards Ltd.	132.50	100	Nil	Nil	Nil		6
49.68	48.11	228.44	139.44	0.03	Jayant Paper Mills Ltd.	177.50	100	8.00	10.00	10.00	20.00	6
49.00	66.29	195.01	129.55	0.01	Paper & Pulp Conversions Ltd.	120.00	100	12.00	12.00	12.00		7
225.00	373.90	818.97 (0.02)	331.59	...	Pudumjee Pulp & Paper Mills Ltd.	23.75	10	1.00	1.00	1.00	1.00	12
96.00	156.00	502.71	189.24	12.00	Rohit Pulp & Paper Mills Ltd.	215.00	100	8.00	12.00	14.00	14.00	3
273.19	456.00	2,058.32	1,233.72	Nil	Sirpur Paper Mills Ltd.	31.00	10	0.85	1.00	1.25		6
410.00	698.20	2,541.47 (20.35)	1,468.55	0.25	West Coast Paper Mills Ltd.	117.50	100	10.00	12.00	8.00	Nil	6
					STEEL, METALS & ALLOYS							
67.45	107.10	319.67 (1.17)	99.00	Nil	Bhoruka Steel Ltd.	42.00	10	Nil	1.20			6
359.39	611.53	1,390.25 (44.75)	808.39	0.03	Ferro Alloys Corporation Ltd.	287.50	100	12.00	12.00	12.00	15.00	12
99.18	18.24	447.43 (2.05)	106.98	Nil	Firth (India) Steel Co. Ltd.	18.50	10	Nil	Nil	Nil	Nil	3
261.37	213.20	529.28 (1.96)	320.83	Nil	Khandelwal Ferro Alloys Ltd.	150.00	100	14.00	14.00	14.00		12
528.50	1,287.79	5,186.51 (31.05)	1,047.76	179.99	Mahindra Ugine Steel Co. Ltd.	64.00	10	1.40	1.40	1.40	1.80	12
807.36	463.56	2,340.66 (34.86)	1,355.80	Nil	Mukand Iron & Steel Works Ltd.	31.00	10	0.70	0.60*	1.00	1.20	6
5,144.00	8,723.00	49,143.00 (1,670.00)	31,519.00	89.00	Tata Iron & Steel Co. Ltd.	316.50	100	10.00	11.00	12.00	13.50	3

* For 15 months period. xd=Ex-dividend. A—Represent Investments.

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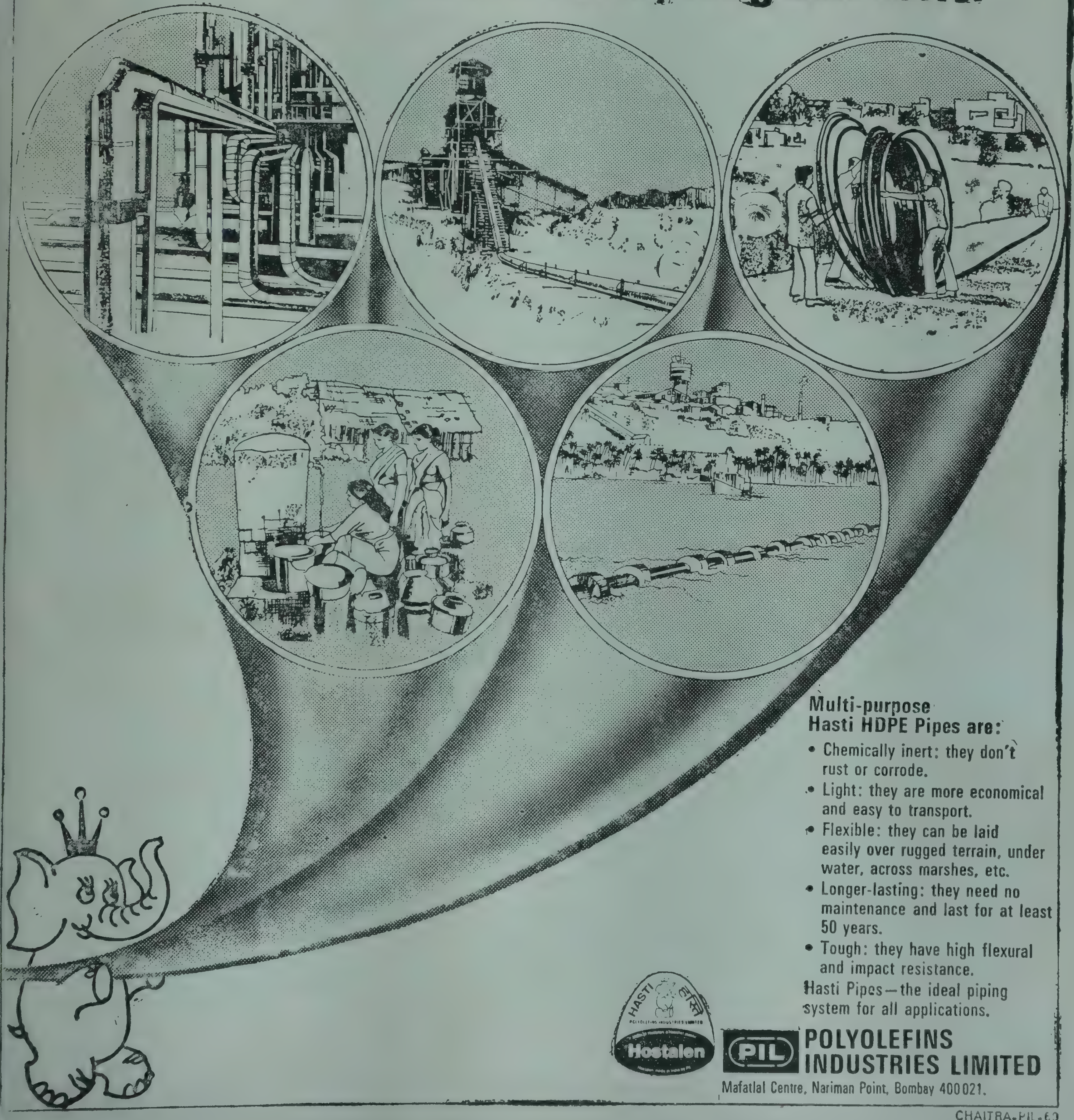

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ENGINEERING

In lakhs of rupees					Company	Latest market Quotation	Paid-up per Share	Dividend per Ordinary share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/Loss Carried Forward		(Rs.)	(Rs.)	1977 (Rs.)	1978 (Rs.)	1979 (Rs.)	1980 (Rs.)	
105.00	115.45	336.81 (15.25)	87.17	Nil	Alfred Herbert (India) Ltd.	17.00	10	0.50	0.70	1.00		12
50.00	310.86	1,176.16 (50.77)	423.94	30.73	Antifriction Bearings Corporation Ltd.	46.00	10	1.50	1.70	n.a.	1.70*	3
382.35	211.44	1,658.12 (131.04)	860.67	Nil	Associated Bearing Co. Ltd.	390.00	100	20.00	20.00	20.00	17.00	12
241.79	426.73	300.64 (8.95)	164.83	Nil	Atlas Copco (India) Ltd.	39.50	10	1.00	1.00	1.10	1.20	12
248.00	418.31	1,534.15 (2.90)	629.64	13.73	Bharat Forge Company Ltd.	50.00	10	1.00	1.00	1.00		6
138.79	192.26	241.58 (1.70)	96.29	Nil	Blue Star Ltd.	33.00	10	1.80	2.00	1.50	1.70	12
33.43	26.45	37.75	29.67	0.02	Brady & Morris Engineering Co. Ltd.	57.50	100	10.00	10.00	10.00	12.00	12
100.00	34.32	569.55	377.16	0.09	Central India Machinery Mfg. Co. Ltd.	30.50	10	0.80	1.00			3
182.00	586.86	1,140.82 (2.61)	347.79	Nil	Elecon Engineering Co. Ltd.	425.00	100	17.00	17.00			12
134.40	173.13	698.08	337.01	0.06	Fit Tight Nuts & Bolts Ltd.	257.50	100	19.00	16.00	17.00	19.00	9
39.95	...	182.09 (44.20)	81.72	—15.47	Fuel Injections Ltd.	85.00	100	Nil	n.a.	Nil**		6
264.00	142.10	818.99	118.06	8.12	Gabriel India Ltd.	19.00	10	2.00	2.00	1.00	1.00	5
399.51	286.25	1,422.53	323.61	Nil	Goetze (India) Ltd.	28.00	10	2.00	1.50	1.50		12
90.00	26.04	230.84	120.04	Nil	Gontermann-Peipers (India) Ltd.	10.75	10	Nil	Nil	Nil		4
39.88	127.78	234.66	65.16	0.03	Gujarat Machinery Manufacturers Ltd.	200.00	100	12.00	15.00	15.00		9
180.00	471.08	793.97	262.96	Nil	Gujarat Steel Tubes Ltd.	570.00	100	15.00	15.00*	16.00	18.00	6
400.00	578.90	941.59 (91.28)	353.34	Nil	Hindustan Brown Boveri Ltd.	306.25	100	15.00	15.00	15.00	16.00	4
182.00	105.41	455.80 (0.83)	257.70	3.17	Hindustan Wires Ltd.	15.50	10	Nil	0.60	0.60	0.80	3
35.00	79.36	137.78	73.41	0.06	Indabrator Ltd.	13.00	10	1.20	1.20	1.20	1.20	12
75.00	315.45	728.69	417.06	Nil	Indian Tool Mfrs. Ltd.	405.00	100	12.50	12.50	12.50	15.00	3
187.30	296.51	286.25	132.40	Nil	Ingersoll Rand (India) Ltd.	114.00	10	‖ Nil	2.50	4.50	4.20	12
150.00	275.51	554.32	295.44	Nil	Jyoti Ltd.	207.50	100	12.00	12.00	12.00	14.00	6
151.81	1,023.56	1,043.72 (102.49)	630.25	75.45	Kamani Engineering Corporation Ltd.	68.50	10	1.00	1.50	2.00	2.00	9
303.89	488.21	1,214.27 (19.78)	581.47	Nil	Kirloskar Brothers Ltd.	48.00	25	1.50	3.00	3.00	3.375	7
420.00	1,215.50	1,998.25 (155.04)	838.72	Nil	Kirloskar Cummins Ltd.	560.00	100	18.00	15.00	20.00	20.00	9
575.00	761.93	1,731.25	930.49	Nil	Kirloskar Oil Engines Ltd.	32.75	10	1.00	1.00	1.20		6
257.83	493.91	1,016.91 (22.06)	512.58	Nil	Kirloskar Pneumatic Co. Ltd.	50.00	10	1.20	1.20	1.20	1.50	6
93.50	84.26	364.80	110.22	Nil	K. S. B. Pumps Ltd.	49.00	10	Nil	2.20	2.20		12
1,974.42	2,993.06	4,245.85 (184.92)	1,363.95	Nil	Larsen & Toubro Ltd.	69.50	10	1.60	1.60	1.70	1.80	3
75.30	89.90	765.06 (73.16)	391.94	21.42	Machinery Manufacturers Corporation Ltd.	33.50	10	Nil	0.60	1.00	1.00	3
252.40	290.12	1,224.67 (32.61)	481.80	Nil	Mafatlal Engineering Industries Ltd	212.50	100	n.a.	Nil*	Nil	10.00	3
1.144.55	1,684.51	4,462.74 (336.27)	1,680.84	6.29	Mahindra & Mahindra Ltd.	56.00	10	1.50	1.50	2.00	1.80	10
124.85	65.95	329.87 (5.59)	58.19	21.41	Mahindra Spicer Ltd.	29.00	10	1.00	1.00	1.00	1.00	1
200.00	206.37	263.61	142.58	Nil	Mather & Platt (India) Ltd.	46.00	10	n.a.	n.a.	1.50	1.75	6
256.00	560.13	1,652.33 (26.24)	1,083.22	0.01	Mysore Kirloskar Ltd	255.00	100	10.00	8.00	10.00	15.00	6
156.44	147.88	287.78 (36.18)	376.38	0.23	New Standard Engineering Company Ltd.	122.50	100	14.00	14.00	14.00	10.50	3
125.00	81.21	310.17	78.62	Nil	Perfect Circle Victor Ltd	15.00	10	1.50	1.50	1.50		8
182.00	212.58	579.22 (37.70)	214.95	4.37	Poysha Industrial Co. Ltd.	12.00	10	1.00	1.20	1.50	1.50	3
167.05	273.20	690.70 (20.64)	399.59	Nil	Precision Bearings India Ltd.	135.00	100	Nil	6.00	10.00	10.00	8
39.62	31.49	191.74	56.52	Nil	Press Metal Corporation Ltd.	38.00	10	n.a.	n.a.	1.20	1.30	...
82.00	88.46	159.69	70.83	Nil	Pressure Cookers & Appliances Ltd.	40.00	10	2.00	@2.00	2.00		9
22.40	27.01	143.42	79.23	Nil	Rolcon Engineering Co. Ltd.	220.00	100	15.00	15.00	15.00		12
192.50	514.14	1,005.52 (55.15)	572.39	Nil	Sandvik Asia Ltd.	353.75	100	12.00	20.00	20.00		12
55.00	68.17	334.19	205.02	Nil	Shriram Bearings Ltd.	43.00	10	Nil	Nil	Nil	Nil	6
218.02	217.98	563.26	207.08	Nil	SLM Maneklal Industries Ltd.	200.00	100	16.00	16.00	17.00	17.00	3
299.88	254.54	1,434.88	502.89	Nil	Special Steels Ltd.	115.00	100	7.50	7.50	10.00	7.50	6
29.20	...	...	...	...	Star Machinery Mfg. Co. Ltd.	14.75	10	...	...	...	...	3
50.00	27.21	96.99	19.69	Nil	Stormac India Ltd.	40.00	10	Nil	1.20	1.20	1.50	6
30.00	82.38	133.00	145.78	Nil	Stovec Screens India Ltd.	44.00	10	Nil	1.20	1.50		9
88.65	281.38	739.03 (0.32)	279.76	Nil	Suessen Textile Bearings Ltd.	54.00	10	1.40	1.60	1.50	2.00	9
2,923.00	6,263.07	28,404.69 (1,782.93)	15,098.60	Nil	TataEngineering & Locomotive Co. Ltd.	734.00	100	15.00	15.00	16.00	20.00	3
132.00	166.05	473.40 (38.75)	159.03	Nil	Tata Robins Fraser Ltd.	32.50	10	1.50	2.00	1.60	1.60	3
60.00	—6.33	254.94	78.02	Nil	Tensile Steel Ltd.	30.00	100	Nil	Nil	Nil		3
149.40	274.96	233.54	95.98	. 0.01	Tractors India Ltd.	36.50	10	2.50	2.00	2.00	2.00	6
132.00	43.76	357.22	205.44	Nil	Vickers Sperry of India Ltd.	23.50	10	1.50	1.50	1.50	1.50	3
628.37	977.60	2,165.22	782.75	5.33	Voltas Ltd.	284.00	100	7.00	12.00	15.00	18.00	8
281.80	168.00	321.59	187.20	Nil	Vulcan-Laval Ltd.	33.50	10	1.80	2.00	1.50		12
182.90	406.22	1,051.12	685.98	Nil	Walchand Industries Ltd.	189.00	100	15.00	15.00	16.00		9
319.20	331.99	1,746.37	512.12	Nil	W. G. Forge & Allied Industries Ltd.	11.75	10	1.50	Nil	Nil		3
315.00	475.70	1,178.30 (63.45)	272.24	25.43	Zenith Steel Pipes & Industries Ltd.	61.00	10	1.50	1.50	1.50	1.75	4

* For 15 months period. ** For 18 months period. xr = Ex-right. — Indicate loss carried forward. @ = For 16 months period.

CABLES AND ELECTRICAL GOODS

In lakhs of rupees								Dividend per Ordinary share				
Paid-up Ordinary Capital	Reserves	Gross block	Depreciation	Profit/loss Carried Forward	Company	Latest available quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
111.25	62.19	157.52	19.83	0.05	ASEA Ltd.	33.50	10	Nil	1.50	1.50	1.50	12
201.82	330.68	724.39	248.66	Nil	Asian Cables Corporation Ltd.	335.00	100	12.00	17.00	20.00	20.00	12
59.95	2.85	97.80	75.34	—91.12	Asian Electronics Ltd.	90.00	100	Nil	Nil	Nil*	Nil	6
76.73	53.31	59.79	25.08	Nil	Bajaj Electricals Ltd.	170.00	100	Nil	7.50	10.00	12 00	6
106.67	265.91	508.48 (13.25)	178.52	Nil	Bharat Bijlee Ltd.	265.00	100	11.00	13.00	13.00	15.00	6
960.00	1.045.36	2,344.6! (102.00)	938.46	Nil	Crompton Greaves Ltd	370.00	100	15.00	16.00	16.00	18.00	6
175.21	39.43	406.26	123.72	73.73	DLF Universal Ltd.	7.00	10	Nil	Nil	Nil	Nil	9
58.80	141.32	275.71	133.25	Nil	Devidayal Electronics & Wires Ltd	23.00	10	n.a.	1.00**	1.20	1.30	6
85.00	88.55	296.90	186.39	Nil	Elpro International Ltd.	251.25	100	12.00	16.00	10.00		12
44.64	52.06	75.08	22.80	Nil	Emco Transformers Ltd.	125.00xd	100	Nil	10.00	10.00		9
49.82	—126.41	284.28	80.19	Nil	Estrela Batteries Ltd.	9.00	50	Nil	Nil	Nil		3
160.80	423.71	1183.57 (7.30)	309.19	2.23	Industrial Cables (India) Ltd.	30.00	10	0.50	0.60	1.50	1.50	10
60.00	13.50	200.76 (105.37)	40.79	8.57	Khatau Junker Ltd.	15.50	10	Nil	Nil	1.20	1.20	12
60.00	34.13	86.44	11.88	Nil	Khandelwal Herrmann Electronics Ltd	8.00	10	Nil	Nil	Nil		9
99.81	39.96	267.22 (179.15)	70.78	Nil	Mahendra Electricals Ltd.	171.25	100	7.00	8.00	11.00	6.00**	6
157.50	351.15	379.00 (32.62)	197.15	0.01	Otis Elevator Co. (India) Ltd.	53.00	10	1.80	2.00	2.10++	2.00	11
102.50	138.23	495.60 (17.66)	297.89	6.71	Standard Batteries Ltd.	125.00	100	10.00	Nil	10.00	10.00	6
178.71	143.74	825.31	276.40	—301.11	Sylvania & Laxman Ltd.	20.00	10	Nil	Nil	Nil	Nil	9
79.78	5.98	331.03	123.44	Nil	Toshiba Anand Batteries Ltd.	37.00	10	Nil	0.80	1.50		12

AUTOMOBILES, CYCLES & ACCESSORIES

Paid-up Ordinary Capital	Reserves	Gross block	Depreciation	Profit/loss Carried Forward	Company	Latest available quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
113.90	Nil	1,053.58 (8.00)	665.19	—160.65	Automobile Products of India Ltd.	12.50	10	Nil	Nill+++	Nil		12
470.10	1688.07	2981.32 (205.23)	1573.95	Nil	Bajaj Auto Ltd.	1,550.00	100	14.00	18.00	18.00	20.00	6
318.43	891.32	1589.23 (32.80)	531.70	Nil	Bajaj Tempo Ltd.	88.00	10	1.80	1.00	1.25	1.50	9
190.84	54.41	660.04 (60.67)	231.37	0.89	Bharat Gears Ltd.	45.00	10	Nill	Nil	1.20		7
200.00	126.52	372.81	184.83	Nil	International Instruments Ltd.	22.00	10	Nil	N.l	1.40		12
1,268.38	1,727.75	5,138.48	3,650.63	Nil	Motor Industries Co. Ltd.	432.50	100	12.00	15.00	14.00		12
745.73	227.34	3.314.84 (184.51)	2363.65	—259.94	Premier Automobiles Ltd.	264.00	100	Nil	Nil	Nil	Nil	6
220.05	66.05	1,150.79	265.75	Nil	Ramon & Demm Ltd.	16.50	10	Nil	Nil	Nil		3
508.59	64.19	1,738.96 (196.38)	464.40	—1,532.32	Scooters India Ltd.	9.00	10	Nil	Nil	Nil		3

SHIPPING

Paid-up Ordinary Capital	Reserves	Gross block	Depreciation	Profit/loss Carried Forward	Company	Latest available quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
753.23	317.73	6641.94 (128.41)	1365.19	202.09	Chowgule Steamships Ltd.	26.00	10	1.00	Nil	Nil	Nil	3
200.00	657.64	3,979.52	1,518.14	0.63	Dempo Steamships Ltd.	640.00	100	10.00	Nil	Nil		6
1,533.00	3,078.67	1,8118.73	4,906.73	118.33	Great Eastern Shipping Co. Ltd.	60.00	10	1.50	Nil	Nil	2.50	6
1,894.59	2,387.65	2,6001.21 (2,965.72)	8,138.80	—8.86	Scindia Steam Navigation Company Ltd.	32.90	20	2.50	Nil	Nil	Nil	6
209.93	165.00	2,652. 05	1,254.58	—323.46	Seven Seas Transportation Ltd	17.00	10	Nil	Nil	Nil	Nil	12

DYES, CHEMICALS & PHARMACEUTICALS

Paid-up Ordinary Capital	Reserves	Gross block	Depreciation	Profit/loss Carried Forward	Company	Latest available quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
85.77	143.32	469.88 (70.15)	159.14	0.04	Adarsh Chemicals & Fertilisers Ltd.	220.00	100	10.00	15.00	15.00	10.00	12
1.80	1.93	4.37	1.39	Nil	Aegis Chemical Industries Ltd	26.50	10	Nil	n..a	1.00*	1.00	3
210.00	265.58	652.76 (14.86)	340.60	Nil	Albright Morarji & Pandit Ltd.	85.00	50	8.00	10.00	8.00		10
344.92	345.39	1,410.11	927.17	0.04	Alembic Chemical Works Co. Ltd.	70.50	100	12.00	12.00	8.00		12
326.62	818.26	1,817.28 (44.77)	1,017.01	5.16	Amar Dye-Chem Ltd.	174.00	100	12.00	12.00	12.00	12.00	12
119.88	31.40	220.62 (3.09)	103.03	23.67	Amines & Plasticizers Ltd.	15.50	10	Nil	Nil	0.80	1.50	9
41.03	21.16	262.19 (0 .01) (1.22)	130.48	Nil	Arlabs Ltd.	79.00	100	12.00	6.00	N'l		6
140.00	277.79	753.95 (51.68)	324.58	Nil	BASF India Ltd.	57.00	10	2.00	2.00	2 00	2.00	12
811.00	717.00	1,936.85 (89.27)	1.002.27	Nil	Bayer (India) Ltd.	250.00	100	15.00	16.00	16.00	8.00	12
100.00	100.82	426.93 (14.31)	233.00	3.49	Boehringer-Knoll Ltd.	18.00	10	1.40	1.20	1.20	1.20	4
226.42	183.50	535.74 (13.41)	197.22	Nil	Boots Company (India) Ltd.	24.50	10	1.80	2.20	2.00	2.00	12
53.33	68.46	109.72 (0.10)	64.36	Nil	Borax Morarji Ltd.	137.50	50	8.00	10.00	10.00	10.00	3
60.00	Nil	261.83 (4.20)	70.23	—39.20	Citric India Ltd.	42.00	100	Nil	Nil	Nil	Nil	3
794.00	607.53	3,135.31 (254.26)	1,242.44	Nil	Colour-Chem Ltd.	225.00	100	12.00	12.00	12.00	12.00	3
240.00	140.97	290.13	184.71	Nil	Crescent Dyes & Chemicals Ltd.	17.75	10	2.50	1.40	1.75	1.75	9
455.95	582.74	582.74 (140.61)	258.84	Nil	Cyanamid India Ltd.	39.00	10	n.a.	Nil	3.00		11
81.00	249.42	573.95	218.81	Nil	Deepak Nitrite Ltd.	29.50	10	1.20	1.40	1.40		10
642.38	458.18	1,542.21 (47.88)	935.95	Nil	Dharamsi Morarji Chemical Company Ltd.	110.00	50	8.00	8.00	8.00	9.00	12
234.78	598.38	1,871.63 (30.25)	1,246.87	2.13	Dhrangadhra Chemical Works Ltd.	116.25	100	Nil	Nil	10.00	12.00	3
92.00	104.07	210.11	107.52	Nil	Duphar-Interfran Ltd.	25.00	10	n.a.	1.20	1.60		12
256.50	371.42	1230.55 (38.26)	528.14	Nil	Excel Industries Ltd.	31.00	10	1.80	1.80	1.90	1 00	9
204.00	187.14	434.83	175.66	Nil	German Remedies Ltd.	26.00	10	1.40	1.40	1.40	1.40	12

* 15 months perio ++ 14 months period. xd = Ex-dividend —Indicates loss carried forward ** 18 months period +++ 17 months period

DYES, CHEMICALS & PHARMACEUTICALS

In lakhs of Rupees								Dividend per Ordinary Share				
Paid-up Ordinary Capital	Reserves	Gross Block	Depre- ciation	Profit/loss Carried forward	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Account Closed
1,440.00	1,492.94	3,424.73 (346.55)	1,003.99	0.10	Glaxo Laboratories (India) Ltd.	22.00	10	1.80	1.90	2.00	1.60	6
1,599.59	7,278.64	14,012.98 (1,898.96)	8,119.29	Nil	Gujarat State Fertilizers Co. Ltd.	455.00	100	22.00	22.00	22.00	22.00	12
106.16	174.61	673.51 (1.10)	207.53	13.63	Gujchem Distillers India Ltd.	215.00	100	12.00	10.00	15.00	15.00	3
735.00	724.37	1,826.75 (72.03)	1,242.17	0.84	Herdillia Chemicals Ltd.	26.00	10	2.00	2.50	2.00	2.00	12
248.69	341.46	725.63 (24.66)	298.89	0.01	Hico Products Ltd.	34.50	10	n.a.	n.a.	1.60	1.60	12
2,916.10	5,516.58	9,276.42 (588.52)	3,008.46	Nil	Hindustan Lever Ltd.	45.50	10	2.00	2.00	2.50	2.50	12
628.67	445.22	1,299.23	442.78	Nil	IDL Chemicals Ltd.	17.00	10	0.80	1.00	0.60	0.80	6
600.00	1,014.54	3,275.96 (173.82)	1,303.66	33.73	Indian Dyestuff Industries Ltd.	270.00	100	16.00	16.00	20.00	13.00	3
496.09	1,041.98	1,735.37 (45.30)	836.77	9.58	Indian Organic Chemicals Ltd	345.00	100	15.00	15.00	15.00	12.00	3
96.10	94.51	164.06 (1.71)	76.76	Nil	ION Exchange (India) Ltd.	40.00	10	3.00	2.40	1.80	2.00	12
101.64	146.14	352.85 (16.18)	130.00	Nil	IVP Ltd.	42.00	10	2.50	2.50	1.50	2.00	12
60.22	204.59	695.05 (77.31)	367.12	Nil	J K Chemicals Ltd.	175.00	100	8.00	15.00	Nil		12
135.00	107.75	639.45 (51.98)	136.06	—143.65	Jayant Vitamins Ltd.	8.50	10	n.a.	++Nil	Nil	Nil	6
134.87	224.00	397.56	426.96	0.59	Jay Shree Chemicals Ltd.	16.75	10	1.00	1.00	1.00	1.00	3
1,241.46	16.77	7,169.88 (91.44)	2,972.15	—1,751.07	Mangalore Chemicals & Fertilisers Ltd. ...	8.25	10	Nil	Nil	Nil	Nil	12
300.00	201.48	604.44	248.33	Nil	May & Baker (India) Ltd.	16.00	10	n.a.	n.a.	1.00		12
2,400.00	2,000.82	8,536.14 (203.83)	5,117.20	10.38	National Organic Chemical Industries Ltd ...	250.00	100	14.00	16.00	16.00	12.00	12
1,004.59	777.28	1,064.53 (42.08)	630 74	50.96	Pfizer Ltd.	25.00	10	1.50	1.60	2.20		11
200.00	293.64	1,047.93 (12.48)	533.31	0.02	Polychem Ltd.	82.00	50	6.00	6.00	6.00		3
900.00	975.40	22,89.19 (121.72)	1,160.73	40.83	Polyolefins Industries Ltd.	290.00	100	14.00	16.00	16.00	16.00	12
150.00	96.37	470.91 (53.17)	259.34	0.01	Richardson Hindustan Ltd.	24.50	10	2.40	2.40	1.20	2.00	6
350.00	726.47	1,259.61 (84.14)	739.44	Nil	Sandoz (India) Ltd.	29.00	10	1.60	1.60	1.60	1.15	12
96.60	105.96	205.96	87.04	Nil	Searle (India) Ltd.	39.00	10	2.00	2.00	2.00		12
269.43	233.68	1,069.60	368.51	Nil	Sudarshan Chemical Industries Ltd.	12.50	10	2.20	1.50	1.20		6
575.00	557.53	2,563.58 (80.92)	1,785.23	19.35	Synthetics & Chemicals Ltd.	117.50	100	15.00	15.00	12.00	Nil	12
933.91	2,036.27	7,480.50 (784.43)	3,048.30	Nil	Tata Chemicals Ltd.	74.00	10	1.70	1.70	1.70	2.00	6
50.00	10.07	150.27	32.09	Nil	Terpene Industries Ltd.	10.50	10	Nil	2.00	2.00		6
60.00	103.85	211.37 (1.73)	131.36	Nil	Ultramarine & Pigments Ltd....	400.00	100	12.00	Nil	12.00		3
90.00	151.92	446.42 (25.12)	219.75	Nil	Unichem Laboratories Ltd.	160.00	100	14.00	15.00	15.00	15.00	9
279.63	179.37	744.79 (29.61)	525.39	—89.06	United Carbon India Ltd.	295.00	100	Nil	Nil	Nil		12
298.12	112.33	472.98 (9.78)	292.96	Nil	Warner-Hindustan Ltd.	24.50	10	2.50	2.50	2.15	1.90	11
1,242.64	1,270.00	6,415.94 (524.73)	2,837.43	695.59	Zuari Agro Chemicals Ltd.	31.00	10	Nil	1.00	1.50	1.50	6
					SUGAR & BREWERIES							
180.70	15.78	320.20	258.04	—6.35	Belapur Sugar & Allied Industries Ltd. ...	41.00	50	3.00	Nil	Nil	Nil	9
17.50	112.91	247.06 (0.64)	161.82	4.74	Bhopal Sugar Industries Ltd.	45.00	10	Nil	0.50	1.75	2.25	9
15.94	97.31	178.29	114.39	Nil	Gwalior Sugar Co. Ltd.	200.00	100	Nil	12.00	10.00	10.00	6
336.00	600.68	2,594.81 (567.48)	936.17	4.37	Hindustan Sugar Mills Ltd.	235.00	100	5.00	Nil	Nil	13.00	6
151.45	268.68	54.66	19.52	Nil	Jagatjit Sugar Mills Co. Ltd.	...	10	1.20	1.20	1.20		12
86.13	65.37	318.92	207.52	Nil	Kesar Sugar Works Ltd.	92.00	50	Nil	Nil	Nil		6
132.30	136.54	542.49	348.24	10.67	Maharashtra Sugar Mills Ltd.	56.00	50	Nil	2.00	2.00	5.00	6
61.16	114.73	182.07	97.15	Nil	New Swadeshi Sugar Mills Ltd.	231.00	100	25.00	17.00	7.50		6
154.97	285.56	839.78	404.69	Nil	Oudh Sugar Mills Ltd.	197.50	100	15.00	12.00	Nil		6
62.50	150.13	356.74	193.61	Nil	Phaltan Sugar Works Ltd.	43.00	50	Nil	Nil	Nil		9
34.00	39.67	257.84 (0.81)	193.18	—105.92	Ravalgaon Sugar Farm Ltd.	45.00	50	Nil	Nil	Nil	Nil	9
90.00	90.23	243.45	65.45	Nil	Skol Breweries Ltd.	18.00	10	0.75	0.90	1.40		12
100.90	113.44	667.77 (7.47)	432.30	Nil	Ugar Sugar Works Ltd.	105.00	100	15.00	10.00	9.00		6
					FOOD PRODUCTS, VEG. OILS & SOAPS							
300.00	411.46	856.51 (21.28)	199.45	Nil	Cadbury India Ltd.	22.50	10	1.20	1.30	1.40	0.60	12
75.00	44.09	145.42 (7.08)	59.70	Nil	Corn Products Co.(India) Ltd.	13.00	10	Nil	1.00	1.20	0.80	9
450.00	341.71	1,008.48 (85.13)	407.69	Nil	Food Specialiites Ltd.	31.00	10	2.00	2.50	2.50	2.00	12
15.00	11.54	60.72	40.71	Nil	Sathe Biscuit & Chocolate Co. Ltd.	70.00	100	10.00	10.00	15.00	10.00	3
75.50	91.41	303.43 (17.81)	137.89	Nil	Tungabhadra Industries Ltd.	21.50	10	1.20	Nil	1.10	1.50	9
					POTTERIES & TILES							
21.27	0.36	147.93	54.38	Nil	Bombay Potteries and Tiles Ltd.	92.50	100	Nil	Nil	Nil		3
49.00	57.61	252.45	171.07	Nil	Parshuram Pottery Works Co. Ltd.	26.00	25	2.25	Nil	Nil		8
					RUBBER GOODS & TYRES							
24.75	36.80	43.74	36.41	Nil	Associated Rubber Industries Ltd	144.00	100	15.00	16.00	20.00		12
450.00	1,475.31	2,698.94 (20.77)	827.52	Nil	Bombay Tyres International Ltd.	13.00	10	Nil	Nil	Nil		10
534.34	861.49	2,356.48 (76.19)	1,280.59	25.24	Ceat Tyres of India Ltd.	205.00	100	10.00	15.00	17.00	17.00	12
180.00	70.59	1,120.78 (292.17)	530.58	—187.13	Premier Tyres Ltd.	102.00	100	Nil	Nil	Ni		6
191.15	14.26	817.79 (1.70)	299.95	—284.21	Swastik Rubber Products Ltd	5.25	10	Nil	Nil	Nil	Nil	6

++ 14 months peried. * 15 months period. — Indicates loss carried forward.

OTHERS

In lakhs of rupees					Company	Latest available Quotation	Paid-up per Share	Dividend per Ordinery Share				Accoun Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss carried forward		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
66.60	60.27	234.88 (11.64)	90.57	0.28	Associated Stone Industries (Kotah) Ltd.	9.75	10	1.20	1.00	1.20	1.00	9
60.00	34.58	130.34 (27.42)	46.20	0.01	Blow Plast Ltd.	66.00	10	1.00	2.00	2.50		7
551.72	510.53	1109.44 (10.74)	524.91	12.71	Bombay Burmah Trading Corporation Ltd	46.00	25	4.00	4.50	4.50	4.50	9
150.00	103.28	576.35 (42.06)	247.96	Nil	Bombay Oxygen Corporation Ltd.	125.00	100	15.00	15.00	15.00	15.00	12
149.61	146.93	247.85 (4.74)	145.11	Nil	Borosil Glass Works Ltd.	30.00	10	1.00	1.50	1.80	2,00	12
135.00	309.12	431.60 (6.10)	174.97	0.04	Camphor & Allied Products Ltd.	200.00	100	15.00	15.00	15.00		12
181.79	178.93	757.62 (5.07)	358.40	0.02	Caprihans India Ltd.	16.25	10	n.a.	1.20	1.20	1.20	3
38.00	82.02	233.62 (2.20)	159.65	Nil	Carona Sahu Co. Ltd.	152.00	100	n.a.	12.00	15.00	9.00	4
80.00	...	...	...	...	Cemindia Co. Ltd.	35.00	10	n.a.	..	1.00		9
23.98	4.83	43.67	26.85	Nil	Chemicoat Ltd.	50.00	100	Nil	Nil	Nil	Nil	3
115.42	68.49	348.35	105.51	Nil	Eastern International Hotels Ltd.	9.00	10	...	...	1.00	1.00	...
175.00	400.70	1221.08	536.16	Nil	Empire Industies Ltd.	29.00	15	n.a.	1.50**	1.50	1.50	6
250.20	191.80	697.51 (4.19)	312.13	18.71	Fibreglass Pilkington Ltd.	19.75	10	1.80	2.00	1.60	1.60	3
42.00	66.15	181.85	72.91	Nil	G. Claridge & Co. Ltd.	150.00	100	Nil	8.00	10.00	Nil	12
154.56	351.32	1944.88 (85.05)	1014.06	1.67	Gammon India Ltd.	20.25	10	1.60	1.80	1.80	1.80	7
88.00	164.18	289.38 (19.71)	128.42	Nil	Garware Paints Ltd.	39.00	10	1.40	1.50	1.60	1.60	6
60.00	56.75	206.73	49.86	3.83	Garware Wall Ropes Ltd.	33.00	10	Nil	0.39	1.20	1.60	9
500.00	1,488.07	2,487.40 (8.69)	920.24	0.08	Golden Tobacco Co. Ltd.	16.00	10	1.20	1.00	1.20	1.50	6
216.00	185.58	388.73 (2.34)	229.27	Nil	Goodlass Nerolac Paints Ltd.	50.00	50	2.50	1.50	1.60	2.00	12
425.25	676.81	377.28 (0.19)	202.25	Nil	Greaves Cotton & Co. Ltd.	200.00	100	12.00	12.00	13.00	15.00	6
500.00	42.98	87.02	37.62	Nil	Hardcastle & Waud Mfg. Co. Ltd.	11.00	10	Nil	Nil	1.00		12
66.00	32.50	55.74 (14.68)	11.07	80.26	Hindustan Dorr-Oliver Ltd.	96.00	10	++	3.70	5.50	5.50	9
248.17	388.19	529.45 (8.13)	348.71	Nil	Hindustan Ferodo Ltd.	42.00	10	2.70	2.80	2.70	2.80	12
252.00	306.19	161.40	81.64	0.39	Hoechst Dyes & Chemicals Ltd.	27.50	10	1.70	1.70	1.50	1.60	12
50.00	103.99	44.77	14.02	0.01	India Photographic Co. Ltd.	78.00	10	Nil	Nil	1.60	2.50	10
216.72	218.53	240.58 (24.07)	132.23	Nil	Indian Card Clothing Co. Ltd.	38.00	10	1.85	2.40	2.75	3.05	3
453.60	557.82	2,048.25 (85.82)	617.13	Nil	Indian Hotels Co. Ltd.	128.00	10	2.00	2.50	2.50	2.20	3
150.00	240.17	820.96 (5.24)	493.91	21.96	Indian Hume Pipe Co. Ltd.	90.00	100	16.00	12.80	12.80		6
160.00	58.48	348.13	237.67	Nil	Indo-Asahi Glass Co. Ltd.	18.50	10	Nil	Nil	1.20		...
160.00	378.74	830.06 (137.71)	291.82	Nil	Indo-Burma Petroleum Co. Ltd.	22.75	10	1.20	1.20	1.30	1.60	3
250.00	131.69	967.05 (10.31)	374.41	2.09	Internationl Computers Indian Manufacture Ltd	22.00	10	1.10	1.50	1.50	1.50	9
124.96	81.23	96.10	63.25	13.66	Killick Nixon Ltd	240.00	100	Nil	Nil	8.00	Nil	11
60.00	82.91	361.79	160.34	Nil	Laxmi Starch Ltd.	175.00	100	Nil	Nil	8.00	12.00	3
40.00	5.12	16.84	8.91	Nil	Muller & Phipps (India) Ltd.	7.00	10	1.10	1.10	0.80	Nil	12
26.25	35.60	134.32	68.59	2.59	New India Fisheries Ltd.	110.00	100	Nil	Nil	8.00	Nil	3
164.20	243.80	720.35 (1.75)	456.57	Nil	New India Industries Ltd.	185.00	100	17.00	17.00	16.00	16.00	12
41.33	64.64	216.12	140.57	0.04	Permanent Magnets Ltd.	127.50	100	12.00	15.00	15.00		12
36.00	—15.00	140.59	48.64	Nil	Polson Ltd.	80.00	100	Nil	Nil	Nil		3
18.00	...	...	...	...	Preecision Jewels Ltd.	13.00	10	...	...	...	...	..
123.61	138.46	22.61	14.39	34.08	Premier Construction Co. Ltd.	82.00	60	6.00	8.10	12.00	12.00	12
496.04	740.79	1224.73 (96.96)	350.55	Nil	Rallis India Ltd.	177.50	100	Nil	15.00	15.00	18.00	8
12.00	14.15	18.31	3.11	Nil	Roplas India Ltd.	55.00	10	2.50	3.00	1.50		12
35.80	121.28	327.80	151.29	0.02	Supreme Industries Ltd.	506.25	100	15.00	16.00	20.00	24.00	6
441.47	1,032.68	2281.27	1069.52	Nil	Tata Oil Mills Co. Ltd.	118.00	25	3.00	3.75	4.00	5.00	3
603.20	651.27	814.22 (22.66)	479.49	Nil	Vazir Sultan Tobacco Co. Ltd.	16.25	10	1.70	1.70	1.70	1.80	9
845.00	583.83	2915.80 (122.79)	1129.26	131.30	Wimco Ltd.	14.35	10	1.60	1.20	1.40	1.50	12

CALCUTTA

COTTON TEXTILES

In lakhs of rupees					Number installed		Company	Latest available Quotation	Paid-up per share	Dividend per Ordinary Share				Accounts Closed
Paid up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
120.00	169.40	802.24	251.69	0.03	46744	16	Aditya Mills Ltd	21.50	10	0.80	1.50	1.50	Nil	12
250.00	724.96	1870.44 (41.97)	958.15	Nil	123024	2	Bharat Commerce and Industries Ltd.	37.40	10	1.00	1.50	2.00	2.00	12
79.92	38.10	1208.85 (24.28)	524.17	—13.90	44,224	1,097	Birla Cotton Spg. & Wvg. Mills Ltd.	14.00	10	Nil	Nil	Nil	Nil	3
60.95	223.87	1001.98 (22.32)	548.94	0.10	61,836	937	Bowreah Cotton Mills Co. Ltd.	15.00	10	1.25	1.75	1.75	1.50	12
60.00	109.81	288.97	239.96	Nil	38,416	604	Cawnpore Textiles Ltd.	4.00	5	Nil	Nil	Nil	Nil	3
59.38	7.84	424.27 (0.82)	293.98	2.38			Dunbar Mills Ltd.	9.12	10	Nil	Nil	Nil	Nil	12
94.50	271.20	779.84 (2.12)	665.47	Nil	1,18,092	2,376	Elgin Mills Co. Ltd.	9.87	10	Nil	Nil	1.50		12
449.97	2,003.21	4,719.26 (20.06)	2,423.96	8.50	76,424	2,215	Kesoram Industries & Cotton Mills Ltd.	45.00	10	1.00	1.30	1.70	1.70	3
157.50	745.07	422.36	178.60	Nil	28,272	Ni	Sutlej Cotton Mills Ltd.	25.25	10	1.25	1.50	2.00	2.00	3

JUTE TEXTILES

In lakhs of Rupees					Company	Latest available Quotation	Paid-up per Share	Dividend per Ordinary Share				Accounts Closed
aid-up rdinary apital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
60.00	1.67	343.76 (0.48)	243.82	—122.11	Agarpara Company Ltd....	6.12	10	Nil	Nil	Nil		3
70.86	308.38	1,274.80 (6.95)	822.82	Nil	Anglo India Jute Mills Co. Ltd.	212.00	100	5.00	10.00	15.00	15.00	12
40.00	15.89	483.73 (10.81)	316.35	12.65	Auckland Jute Company Ltd	89.00	100	Nil	Nil	Nil		3
71.68	179.81	756.42	549.29	Nil	Bally Jute Co. Ltd.	11.25	10	Nil	Nil	Nil	1.00	3
797.81	2,201.12	4,352.35	3,082.74	Nil	Birla Jute Mfg. Co. Ltd.	33.10	10	2.00	2.00	1.00	1.10	3
49.45	34.75	312.07 (10.19)	181.05	Nil	Budge Budge Jute and Industries Ltd.	3.25	3	Nil	Nil	0.18		6
29.58	111.31	402.13 (1.37)	323.27	16.82	Champdany Jute Co. Ltd.	15.00	10	Nil	Nil			3
49.43	152.00	532.37 (19.99)	382.21	0.18	Cheviot Co. Ltd.	6.56	3	Nil	Nil	0.36	0.375	11
30.15	116.45	349.34 (1.77)	247.52	0.87	Chitavalsah Jute Mills Co. Ltd.	70.00	10	Nil	1.00	1.20		7
31.49	64.98	372.39 (15.41)	237.60	Nil	Dalhousie Jute Co. Ltd.	97.00	100	Nil	Nil	Nil	1.00	3
30.00	10.55	294.27	131.01	—135.75	Empire Jute Co. Ltd.	3.37N	10	Nil	Nil	Nil	Nil	7
56.99	62.78	534.73 (1.05)	295.62	1.36	Fort William Co. Ltd.	12.75	10	Nil	Nil	Nil	Nil	3
84.32	Nil	482.71	324.09	—468.82	Ganges Manufacturing Co. Ltd.	4.31	10	Nil	Nil	Nil	Nil .	3
120.00	58.75	610.47 (14.36)	325.90	13.83	Hastings Mills Ltd.	85.00	100	Nil	Nil	Nil	Nil	3
37.80	262.28	233.09	191.50	Nil	Hooghly Mills Co. Ltd.	14.00	10	0.75	0.75	0.75		3
65.63	44.01	462.59 (1.50)	340.48	Nil	Howrah Mills Co. Ltd.	6.62	10	Nil	Nil	Nil¹	Nil	3
52.50	330.84	973.01 (8.66)	675.92	0.29	Hukumchand Jute Mills Ltd.	33.50	7.50	Nil	Nil	0.50	3.00	3
87.30	200.16	601.19	437.16	Nil	India Jute Co. Ltd.	17.25	12.50	Nil	1.00	0.50		3
43.20	21.24	468.16	211.35	Nil	Kamarhatty Co. Ltd.	188.00	100	Nil	Nil	Nil		12
54.00	11.81	286.89	221.78	—100.09	Kanknarrah Co. Ltd.	43.00	100	Nil	n.a.	Nil**	Nil	6
7.70	...	...	...	...	Kelvin Jute Co. Ltd.	50.00	100	Nil	Nil	Nil		5
256.00	154.10	1,660.16 (30.32)	1,067.00	—223.45	New Central Jute Mills Co. Ltd.	4.12	10	Nil	Nil	Nil	Nil	3
16.80	2.00	335.50 (2.49)	163.45	—343.55	Northbrook Jute Co. Ltd.	4.00	10	Nil	Nil	Nil	Nil	3
89.06	135.62	741.89 (11.79)	352.37	—66.94	Nuddea Mills Co. Ltd.	7.12	10	Nil	Nil	Nil	Nil	12
106.72	141.65	792.89 (0.75)	364.85	Nil	Reliance Jute & Industries Ltd.	18.12	10	1.80	1.25	1.40	2.25	3

ELECTRICITY

719.50	3,647.33	1,16,615.99 (3,581.74)	5,358.06	4.64	Calcutta Electric Supply Corporation Ltd. ...	16.20	10	...	...	1.30	1.30	3
72.00	195.73	436.67 (7.67)	208.37	6.67	Dishergarh Power Supply Co. Ltd.	5.00	10	1.00	0.75	1.25	1.50	3

CEMENT

00.00	7.81	1,312.60	937.43	—218.84	Jaipur Udyog Ltd.	2.75	10	Nil	Nil			6
70.00	1,269.19	2,477.95 (177.75)	1,314.38	Nil	Orissa Cement Ltd.	39.50	10	2.50	2.50	2.50	2.50	6
75.00	179.88	471.92	219.00	—493.13	Sone Valley Portland Cement Co. Ltd ...	1.75	5	Nil	Nil			12

PAPER

229.63	2,447.44	7,754.22 (1,200.56)	4,366.22	0.05	Ballarpur Industries Ltd	55.30	10	1.50	1.60	1.80		6
125.57	72.32	1,228.35 (19.92)	901.64	—140.47	Bengal Paper Mill Co. Ltd.	10.87	10	Nil	Nil			12
572.62	2,718.49	4,915.70 (300.29)	3,575.01	5.18	Orient Paper & Industries Ltd.	48.60	10	1.75	1.75	1.75	2.00	3
259.06 10.00	482.74	1,696.53 (150.19)	983.73	0.19	Star Paper Mills Ltd.	13.87 56.50	10—O. 10A.O.	1.50 1.50	1.50 1.50	1.00 1.00	1.00 1.00	3
420.35	1,532.75	4,759.74 (424.63)	1,937.96	Nil	Straw Products Ltd.	8.44	10	1.20	1.50	1.80	2.00	12
4.37 417.09 56.05	719.88	2,826.95	184.27	0.05	Titaghur Paper Mills Co. Ltd.	2.06 8.44 8.44	2.50P.O. 10A.O. 10B.O.	0.33 0.80 0.80	0.33 0.80 0.80	0.33 0.60 0.60	0.25 1.00 1.00	3
35.70	565.72	2,057.64 (1.79)	820.19	Nil	Tribeni Tssues Ltd.	20.10	10	1.40	1.50	1.85*	1.60	12

STEELS, METALS & ALLOYS

.83	...	3,333.99 (2.37)	1,224.26	—193.31	Bihar Alloy Steel Ltd.	22.25	10	Nil	Nil	Nil	Nil	12
3.99	6,704.34	13,531.14 (257.89)	6,980.31	Nil	Hindustan Aluminium Corporation Ltd. ...	57.50	10	1.00	1.25	1.25		12
9.91	2,983.76	10,625.52 (136.83)	6,345.43	Nil	Indian Aluminium Co. Ltd.	23.50	10	1.00	2.50	1.75		12
4.04	81.00	383.75 (2.30)	115.67	13.76	Usha Alloys and Steel Ltd.	36.75	10	Nil	Nil	Nil	1.00	5

t 18 months period ended. — = Indicates loss carried forward. * 15 months period. B.O. = 'B' Ordinary Shares. N = Nominal quotation.

= Preference Ordinary Shares. A.O = 'A Ordinary Shares.

ENGINEERING

In lakhs of rupees					Company	Latest available Quotation	Paid-up per Share	Dividend per ordinary share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
38.74	10.30	65.81	37.78	0.83	American Refrigerator Co. Ltd.	7.62	10	Nil	Nil			4
300.00	249.97	386.98	217.23	0.01	Avery India Ltd.	28.25	10	2.50	3.00	2.00		12
93.79	55.57	131.93	64.15	0.23	Bells Controls Ltd	14.62	10	0.70	0.70	1.00	1.10	6
117.50	95.41	441.29 (1.95)	47.02	0.01	Davy Ashmore India Ltd.	22.27	10	n.a.	1.50	1.50	1.50	3
80.00	432.61	584.48 (31.13)	343.38	Nil	Electrosteel Castings Ltd.	37.00	10	2.00	2.00	2.00	2.50	9
836.08	1,206.01	3,799.98 (232.08)	1,508.36	Nil	Escorts Ltd.	49.70	10	16.00	20.00			12
1,459.92	3,404.07	5,947.44 (333.12)	2,668.72	Nil	Guest Keen Williams Ltd.	33.10	10	1.40	1.20	1.40	1.40	12
197.44	219.01	11,431.29 (4.29)	906.22	11.78	Jay Engineering Works Ltd.	14.75	10	1.20	1.20	Nil	1.50	3
242.27	266.27	605.28	227.02	Nil	McNally Bharat Engineering Co. Ltd.	22.75	10	2.00	2.25	1.50	1.50	11
100.00	112.94	260.15	154.67	Nil	Molins of India Ltd.	23.12	10	1.00	1.25	1.00	1.50	12
64.00	1.86	108.10 (6.03)	77.35	—66.84	National Rolling & Steel Ropes Ltd.	14.81	10	Nil	Nil			6
100.00	87.12	427.11 (52.96)	236.59	Nil	National Standard Duncan Ltd.	188.00	100	15.00	12.00	12.00	12.00	6
177.76	49.26	338.75 (7.88)	182.61	13.72	Sankey Wheels Ltd.	12.62	10	Nil	Nil			12
92.40	100.22	125.86	64.41	Nil	Schrader-Scovill Duncan Ltd.	34.50	10	1.60	1.80			12
90.00	123.15	219.45 (1.19)	135.25	1.11	Simon Carves India Ltd.	19.00	10	1.60	1.60	1.60	1.60	12
100.00	136.47	241.81 (1.53)	155.70	Nil	Stewarts and Lloyds of India Ltd	17.62	10	1.60	1.60	1.40	1.20	12
150.00	606.30	1,491.83 (23.32)	850.28	Nil	Texmaco Ltd.	76.00	10	1.50	1.50	1.50	2.00	12
318.00	273.37	1,303.45 (17.71)	347.75	Nil	Usha Martin Black Ltd.	29.30	10	1.00	1.00	1.10		12
73.62	163.10	418.77	131.13	Nil	Usha Telehoist Ltd.	60.87	10	1.20	1.00	1.25		6
24.97	28.22	22.71 (0.77)	15.23	Nil	Wellman Incandescent India Ltd.	15.25	10	1.20	1.25	1.25		3

CABLES & ELECTRICAL GOODS

Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
169.87	426.94	741.99 (6.69)	371.36	0.43	Electric Construction & Equipment Co. Ltd.	30.75	10	Nil	1.00	1.30	1.75	10
450.00	305.67	430.35 (3.36)	270.71	Nil	English Electric Co. of India Ltd.	44.50	10	2.80	3.20	2.00	2.20	3
719.45	775.60	668.54	286.25	Nil	General Electric Company of India Ltd.	25.10	10	1.20	1.20	1.20		3
628.89	508.47	1,532.17 (35.72)	874.10	Nil	Indian Cable Co. Ltd.	27.00	10	1.40	1.40	1.20	1.40	3
202.50	234.15	342.07	217.54	Nil	National Insulated Cable Co. of India Ltd.	16.00	10	0.50	0.60	0.70	1.00	4
1,800.00	1,623.68	4,061.72 (181.44)	2,173.47	Nil	Peico Electronics & Electricals Ltd.	29.00	10	1.46	1.00	1.70	1.80	12
260.35	524.50	1,008.87 (3.71)	560.60	Nil	Universal Cables Ltd.	61.50	10	2.00	2.00	1.50	1.75	3
76.23	174.43	407.83	157.70	0.21	Universal Electricals Ltd.	28.31	10	1.00	1.20	1.30		3

SHIPPING

Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
6.25	12.16	24.05	18.67	0.04	Calcutta Landing & Shipping Co. Ltd.	24.00	10	1.00	0.85	1.20		12
495.00	1,213.32	12,767.53	3,588.22	Nil	India Steamship Co. Ltd.	27.40	10	Nil	Nil	Nil	Nil	3
26.39	29.66	46.65	29.21	0.47	Port Shipping Co. Ltd.	15.81	10	1.20	1.50	2.00		12
202.04	653.30	4,475.25	1,408.36	3.71	Ratnakar Shipping Co. Ltd.	38.12	10	Nil	Nil	Nil	0.75	3

DYES, CHEMICALS & PHARMACEUTICALS

Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
481.24	726.21	3,659.57 (25.01)	1,846.07	Nil	Alkali & Chemical Corporation of India Ltd.	23.00	10	1.43	1.00	1.60	1.50	9
30.00	38.10	144.08 (14.42)	95.60	0.01	Calcutta Chemical Co. Ltd.	15.00	10	1.00	Nil			6
748.36	830.30	2,116.35 (33 33)	1,123.55	Nil	Chemicals & Fibres of India Ltd.	25.57	10	1.50	1.00	1.60	1.00	6
806.83	433.28	931.43	514.56	Nil	Chloride India Ltd.	43.40xd	10	2.25	2.40	2.30	2.30	8
184.22	6.32	157.23	78.35	—225.05	East Anglia Plastics (India) Ltd.	10.25	10	Nil	Nil	Nil	Nil	6
120.00	86.01	425.53 (37.73)	254.30	Nil	India Carbon Ltd.	35.00	10	0.80	Nil	1.00	1.80	6
2,898.37	2,266.08	9,834.10	6,117.72	Nil	Indian Explosives Ltd.	29.10	10	1.75	1.05	1.00		9
179.10	437.23	1,303.50 (20.28)	574.26	0.37	Kanoria Chemicals & Industries Ltd.	45.00	10	1.50	1.00	1.00	1.20	3
268.13	475.23	432.18	290.12	Nil	Philips Carbon Black Ltd.	32.87	10	2.00	2.00			11
43.31	95.79	162.77	127.79	Nil	Phosphate Co. Ltd.	168.00	100	16.00	20.00	12.00	15.00	6
3,258.30	1,557.03	8,309.01 (403.36)	4,258.11	Nil	Union Carbide India Ltd	27.10	10	1.60	1.60	1.60	1.40	12

SUGARS & BREWERIES

Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
26.96	55.50	305.30 (1.11)	41.91	...	Balrampur Chini Mills Ltd.	2.50	10	1.00	1.00	Nil	Nil	6
29.24	36.30	117.64 (1.56)	87.73	Nil	Belsund Sugar Co. Ltd.	10.00	7.50	0.73	Nil	Nil		9
36.00	22.00	251.96 (9.87)	186.33	—12.18	Champaran Sugar Co. Ltd.	15.12	10	Nil	Nil	Nil	Nil	9
23.67	97.10	128.59	75.83	0.06	New India Sugar Mills Ltd.	21.44	10	2.50	1.50	1.60		6
33.40	86.06	252.62	113.03	0.59	Ramnugger Cane & Sugar Co. Ltd.	10.06	10	1.00*	Nil			11
65.00	7.37	246.37 (0.34)	183.01	—163.02	Raza Buland Sugar Co. Ltd.	2.00	10	Nil	Nil			6
40.00	281.98	830.00	259.83	—178.07	Shree Krishna Gyanoday Sugar Ltd.	6.06	10	Nil	Nil	Nil	Nil	6
73.55	370.69	655.21 (12.57)	350.15	0.18	Upper Ganges Sugar Mills Ltd	37.62	10	2.00	7.50			6

— Indicates loss carried forward.

* 15 months period.

PLANTATION

In lakhs of rupees					Company	Latest available Quotation	Paid-up per Share	Dividend per ordinary Share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
70.00	52.35	136.06 (0.39)	...	...	Assambrook Estates Ltd.	10.62	10	1.50	2.00	2.00		12
350.00	96.67	746.04	47.66	5.56	Assam Company (India) Ltd.	18.62	10	n.a.	n.a.	1.50	1.75	6
300.00	84.55	584.38 (3.34)	90.86	16.09	Assam Frontier Tea Ltd.	15.00	10	n.a.	Nil	Nil		6
5.50	27.70	103.94	46.11	0.01	Baghmari Tea Company Ltd.	19.62	10	2.00	2.00	1.00	1.00	3
9.18	26.69	58.96	23.18	1.78	Basmatia Tea Company Ltd.	26.25	10	2.50	2.00			12
82.48	86.94	308.56 (0.93)	138.19	8.84	Bishnauth Tea Company Ltd.	16.00	10	1.70	1.70	1.70	1.20	12
1512.21	1027.18	1785.07 (39.71)	815.17	Nil	Brooke Bond India Ltd.	22.50	10	1.30	1.20	1.50	2.00	6
44.40	34.22	97.35	7.62	4.16	Darjeeling Plantation Industries Ltd.	15.00	10	1.90	1.90			12
20.00	43.15	78.90	38.15	1.20	Dhunseri Tea & Industries Ltd.	13.12	10	1.50	2.00	1.50	1.50	12
57.56	97.57	208.04	109.07	0.12	Dimkusi Tea Company Ltd.	20.00	10	3.00	2.00	2.00	1.20	12
175.00	396.97	649.19 (3.72)	58.62	0.02	Doom Dooma India Ltd.	16.31	10	n.a.	n.a.	2.00	2.00	12
203.14	486.27	1763.73 (4.89)	866.42	Nil	Duncans Agro Industries Ltd.	133.00	100	15.00+	10.00	Nil	10.00	9
6.00	...	11.19	...	...	Ellenbarrie Tea Co. Ltd.	100.00	100	Nil	12.00	20.00	30.00	3
245.00	244.05	911.79	76.23	15.42	George Williamson (Assam) Ltd.	20.20	10	Nil	Nil	1.50		6
222.00	136.18	737.77	120.38	0.58	Goodricks Group Ltd.	15.00	10	Nil	Nil	1.00		6
23.29	74.37	225.86	115.64	0.79	Grob Tea Company Ltd.	3.81	5	0.75	0.75	0.12	0.75	12
64.00	...	93.11	...		Hasimara Industries Ltd.	5.44	10	Nil	Nil	Nil		12
22.68	26.72	88.18	4.519	0.56	Hattikhira Tea Company Ltd.	7.50	10	1.50	Nil	Nil		12
19.25	22.91	127.95	59.72	5.38	Huldibari Tea Association Ltd.	9.30	10	2.00	1.50	0.50	...	2
7.00	5.11	20.81	12.06	0.07	Jaybirpara (Dooars) Tea Co. Ltd.	8.00	10	Nil	Nil		...	12
273.33	939.59	2 223.00	946.67	Nil	Jay Shree Tea & Industries Ltd.	44.50	10	1.60	2.00	2.00	2.00	3
250.00	176.21	434.09 (69.11)	...	30.42	Jokai India Ltd.	20.87	10	Nil	Nil	Nil	2.00	3
30.00	21.71	87.47	50.18	0.25	Joonktollee Tea Co. Ltd.	17.00	10	2.50	1.00	1.00	0.50	12
32.48	24.96	54.17	35.64	Nil	Jutlibari Tea Co. Ltd.	23.00	10	3.00	Nil			3
375.00	99.43	353.57	189.61	...	Lipton India Ltd.	12.65	10	...	1.18	0.80		6
10.00	9.69	57.23	20.58	3.30	Murphulani (Assam) Tea Co. Ltd.	18.00	10	2.50	2.00			12
20.00	48.71	128.66	38.05	0.50	Naga Hills Tea Company Ltd.	13.12	10	2.00	1.25			12
7.20	12.84	45.34	27.77	0.08	New Terai Association Ltd.	35.00	10	2.00	1.00			12
36.00	...	0.13		...	Patrakola Tea Company Ltd.	75.00	100	Nil	Nil	Nil		12
12.00	62.59	90.90	32.14	2.22	Rajgarh Tea Company Ltd.	50.00	10	3.00	2.50	3.00		12
7.65	12.48	55.86	34.71	0.09	Ranicherra Tea Company Ltd.	9.50	10	Nil	2.00			12
2.60	16.99	47.80 (0.31)	17.10	Nil	Roopacherra Tea Company Ltd.	8.00	10	1.50	1.60	0.80		3
21.00	49.37	178.36	83.07	Nil	Rungamattee Tea & Industries Ltd.	2.97	10	0.50	Nil	Nil	0.50	12
97.31	162.90	364.74	167.15	Nil	Rydak Tea Syndicate Ltd.	12.75	10	2.50	1.80	1.00	...	12
15.62	3.91	33.46 (0.08)	20.10	Nil	Sungma Tea Company Ltd.	8.00	10	Nil	Nil			12
24.00	21.60	79.78	31.35	Nil	Tengpani Tea Company Ltd.	26.00	10	2.50	3.00	2.00		12
47.59	109.25	183.27	86.05	0.01	Tezpore Tea Company Ltd.	11.81	10	3.00	2.50			12
					TYRES, RUBBER GOODS							
1,499.67	2,635.20	7 018.59 (265.39)	3 335.14	Nil	Dunlop India Ltd.	24.00	10	0.80	1.20	2.00	1.50	12
748.28	443.98	1863.75 (8.43)	1517.16	41.52	Goodyear India Ltd.	18.46	10	0.60	0.60	0.80		12
					OTHERS							
200.00	155.51	678.22 (481.71)	86.83	0.33	Andrew Yule & Co. Ltd.	5.25	10	Nil	Nil			12
188.84	335.76	533.99 (110.09)	177.22	Nil	Balmer Lawrie & Co. Ltd.	191.50	100	8.00	12.00	15.00	16.00	3
375.00	1 431.85	2,446.31	1 431.63	6.21	Bata India Ltd.	17.40	10	2.25	1.50	1.60	1.00	12
631.40	851.17	1,419.35 (99.67)	623.64	Nil	Britannia Industries Ltd.	21.45	10	1.50	1.50	1.50	1.50	3
325.00	222.85	586.71 (3.00)	476.17	Nil	British India Corporation Ltd.	1.94	5	Nil*	Nil	Nil		3
136.23	66.59	180.92 (5.84)	109.84	Nil	British Paints (India) Ltd.	16.37	10	1.70	1.70	Nil		12
23.34	16.59	12.73	3.89	Nil	Duncan Brothers & Co. Ltd.	101.00	100	14.00	12.00	10.00		12
1,075.27	1,007.11	4,449.53 (290.06)	661.88	122.99	East India Hotels Ltd.	24.25	10	1.00	1.80	2.50	1.00	3
135.85	429.99	1515.79 (17.25)	1035.99	1.06	Fort Gloster Industries Ltd.	358.00	100	Nil	Nil	10.00	20.00	3
126.84	240.72	412.71 (3.96)	114.67	Nil	Gillanders Arbuthnot & Co. Ltd.	10.50	10	1.50	1.00	1.00	1.00	3
234.15	241.83	540.77	206.78	Nil	Godfrey Phillips India Ltd.	14.62	10	0.80	0.90	0.90	Nil	12
180.71	322.91	374.10 (16.45)	90.47	0.01	Gramophone Company of India Ltd.	36.87	10	1.80	1.80	1.80	1.40	6
420.75	805.58	2,036.09 (54.92)	732.47	Nil	Graphite India Ltd.	35.25	10	1.40	1.40	1.60	1.60	12
150.00	435.96	639.86 (26.89)	206.68	0.04	Hindusthan Development Corporation Ltd.	76.00	10	1.00	1.00	1.20	2.00	12
73.50	193.32	588.07 (5.88)	386.53	Nil	Hindustan Gas & Industries Ltd.	30.75	7	1.45	1.45	1.50	1.50	3
,316.52	481.06	7,867.21 (10.23)	5,753.21	1.22	Hindustan Motors Ltd.	29.70	10	Nil	Nil	Nil	Nil	3
180.00	51.20	449.74	258.98	—755.23	Hindustan Pilkington Glass Works Ltd.	9.62	10	Nil	Nil			3
73.86	236.86	383.07 (3.63)	251.28	Nil	Hindustan Sanitaryware & Industries Ltd.	29.00	10	1.50	1.70	2.00	2.00	3
190.00	38.04	151.34	19.93	Nil	India Foils Ltd.	24.50	10	Nil	1.50			12
2 274.00	2,624.37	5,498.41 (54.95)	2,485.35	Nil	I T C Ltd.	23.60	10	1.50	1.50	1.50	1.50	3
130.00	230.11	201.37 (5.89)	110.09	13.42	Indian Duplicator Co. Ltd.	22.00	10	1.50	1.50	1.60	1.60	10
821.33	537.76	2,720.41 (60.44)	1,698.83	20 30	Indian Oxygen Ltd.	30.60	10	2.00	1.50	1.00		9
29.88	26.12	143.72	96.06	0.42	Indian Plastics Ltd.	33.25	10	1.20	1.20	1.20	1.20	3
36.00	14.62	40.76 (0.35)	32.60	Nil	Indian Wood Products Co Ltd.	7.12	10	1.50	1.50	Nil		9
200.00	170.25	273.51 (6.63)	163.15	Nil	Jardine Henderson Ltd.	41.25	100	5.00	4.00	Nil	Nil	3

*= For the Period of 15 months xdEx-dividend —=Indicates loss carried forward— X =For the period of 9 months

OTHERS

In lakhs of rupees								Dividend per Ordinary Share				
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss carried forward	Company	Latest available Quotation Rs.	Paid-up per share Rs	1977 Rs	1978 Rs	1979 Rs	1980 Rs	Accounts closed
8.00	243.62	304.32 (10 27)	208.45	Nil	Kusum Products Ltd.	45.00	10	1.50	1.00	1.00	1.75	3
273.91	1,019.52	1,812.37 (2.85)	470.96	0.21	MacNeill & Magor Ltd.	104.00	100	8.00	4.00	4.00	5.50	12
664.12	1,242.30	4,919.22 (63.09)	1,478.19	22.14	Metal Box India Ltd.	18.55	10	Nil	0.80	2.10**	1.25	9
27.00	27.76	18.45 (0.19)	2.55	Nil	Monotype India Ltd.	19.50	10	1.20	1.35	1.50	1.50	9
120.00	141.61	287.66	160.05	2.53	Multimetals Ltd.	11.25	10	1.00	1.00	1.00		3
85.40	98.64	273.69	45.47	Nil	Orient Abrasives Ltd.	24.25	10	Nil	Nil	1.00		6
22.50	29.50	26.20	9.64	Nil	Oriental Carpet Mfrs. (India) Ltd.	20.62	10	1.90	1.20	1.30	1.30	3
79.89	140.13	373.71	71.73	Nil	Rasoi Vanaspati & Industries Ltd.	37.50	10	2.00	2.00	2.00	2.00	12
249.74	226.96	434.06 (4.41)	195.54	Nil	Reckitt & Colman of India Ltd.	25.00	10	1.25	1.40	1.60		12
178.19	182.01	354.23 (1.03)	253.84	0.05	Remington Rand of India Ltd.	22.50	10	1.80	2.00	2.00	2.00	3
500.00	112.55	3,203.01 (132.35)	1,918.80	—5.61	Rohtas Industries Ltd.	7.15	10	Nil	Nil	Nil	Nil	3
145.16	142.69	171.92 (9.48)	96.93	Nil	Shalimar Paints Ltd.	15.50	10	1.25	1.00	1.50	1.50	12
400.00	576.37	528.34 (10.76)	320.25	0.06	Shaw Wallace & Company Ltd.	38.00	10	1.25	1.50	1.50		12
59.99	77.30	262.11	139.21	Nil	Somany-Pilkington's Ltd.	33.50	10	1.00	1.00	1.25	1.25	6
800.00	605.46	2,509.73 (48.69)	649.40	Nil	Tata-Finlay Ltd.	14.90	10	3.00	2.25	1.50		12
34.84	58.54	127.13	71.02	0.09	Window Glass Ltd.	23.62	10	Nil	1.50	1.50		3
176.37	114.85	321.29 (3.39)	266.42	2.96	Woolcombers of India Ltd	10.81	10	0.50	Nil	Nil		12

MADRAS

COTTON TEXTILES

In lakhs of rupees					Number Installed					Dividend per Ordinary Share				
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss carried forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
45.00	161.64	932.37	688.07	2.98	61,800	1,613	Anglo French Textiles Ltd.... ...	218.00	100	Nil	Nil	15.00	15.00	12
11.99	27.48	132 08	101.60	Nil	26,800	...	Asher Textiles Ltd.	100.00	100	10.00	15.00			12
59.42	84.00	432 00	266.91	Nil	62,144	...	Coimbatore Pioneer Mills Ltd. ...	148.00xd	100	15.00	16.00			12
72.90	145.85	534.52	307.83	0.07	53,148	470	Dhanalakshmi Mills Ltd.	150.00	100	7.00	10.00	15.00	15.00	3
12.09	20.40	...	...	0.02	25,168	...	Gnanambikai Mills Ltd.	100 00N	100	Nil	12.00			12
40.00	117.59	338.22	179.76	Nil	52,852	...	Jawahar Mills Ltd.	10.50	5	0.75	1 25	1.00		12
10.40	42.46	194.28	106.71	0.09	29,648	...	Kasturi Mills Ltd.	16.50	25	Nil	Nil	Ni!	3.75	3
71.00 88.75	408.28	...	...	0.23	1,60,384	394	Lakshmi Mills Company Ltd. ...	98.00 52.50	50'O' 25'A''O'	Nil Nil	8.00 4.00	12 00 6.00		3
33.49	130.36	468.74 (5.87)	236.92	0.06...	38,840	348	Loyal Textiles Mills Ltd.	143.00	50	5.00	12.00	7.50	9.00	6
37.50	157.20	295.79	127.52	Nil	33,348	...	Premier Cotton Spinning Mills Ltd....	305.00cd	100	15.00	12.00	15.00		3
125.00	321.69	688.05	325.92	Nil	70,608	360	Premier Mills (CBE) Ltd.	335.00cr	10	1.50	1.20	1.50		3
22.82	46.62	...	...	Nil	28,176	...	Pulliccar Mills Ltd.	75.43	100	12.00	16.00			12
63.04	19.42	156.40	140.75	—75.87	65,264	300	Radhakrishna Mills Ltd.	35.00	25	Nil	Nil			3
72.00	56.17	304.83	205.96	Nil	66,116	...	Rajalakshmi Mills Ltd.	88.00	50	6.00	8.00	10.00	7.50	3
43.05	116.65	303.69	195.00	Nil	36,096	...	Rajapalayam Mills Ltd.	176.00	100	7.50	12.00	20.00	25.00	3
39.71	39.88	239.39 (0.73)	159.66	0.02	28,800	Nil	Rayalaseema Mills Ltd.	65.00xd	100	Nil	Nil	12.00		12
37.38	170.20	439.94	161.19	0.59	50,368	...	Saroja Mills Ltd.	10.00cd	10	n.a.*	1.00	1.50	1.50	3
33.37	136.87	338.71	141.53	0.20	57,992	Nil	Sarvaraya Textiles Ltd.	5.25	10	Nil	Nil	1.00	1.00	3
24.00	...	...	...	...	25,000	...	Shree Valliappa Textiles Ltd. ...	85.00	100	10.00	12.00	17.00		6
20.00	71.54	203.95 (4.58)	101.88	2.03	35,392	...	Sivanandha Mills Ltd.	15.00xd	10	1.50	1.60			12
735.00	747.93	4,935.09	3,021.32	2.49	n.a.	...	South India Viscose Ltd.	267.00	100	10.00	10.00	n.a.*	15.00	3
92.77	9.14	556.63	446.81	—188.43	1,10,812	294	Sree Meenakshi Mills Ltd	6.00	20	Nil	Nil	Nil	Nil	6
20.00	...	...	...	...	33,146	...	Sree Saraswathi Mills Ltd.	2.25	10	Nil	Nil	2.00		3
19.21	29.06	...	...	0.6	34,164	...	Sri Balasubramania Mills Ltd. ...	6.77	10	Nil	0.90			12
13.33	13.69	107.42	69.89	Nil	30,456	...	Sri Kannapiran Mills Ltd.	6.00xd	10	Nil	1.20			12
23.31	49.97	221.63	129.43	Nil	25,304	...	Sri Karunambikai Mills Ltd. ..	70.00xd	100	9.00	12.00			12
45.68	18.22	318.61	238.77	Nil	44976	469	Sri Krishnarajendra Mills Ltd. ...	26.00	50	4.00	4.00	4.50	2.50	3
38.31 1.03	48.37	...	...	Nil	37,860	...	Sri Ramakrishna Mills (Coimbatore) Ltd.	53.64N 2 19N	100 10	12.00 1.20	15.00 1.50	15 00 1.50		3
19.03	2.65	...	...	Nil	36,692	288	Sri Ramalinga Choodambikai Mills Ltd.	75.00	100	Nil	10.00			12
20.00	39.35	169.37	107.96	Nil	25,472	...	Sri Ramnarayan Mills Ltd.	3.47xd	10	1.50	1.70			12
51.00	52.73	330 36 (5.46)	244.84	Nil	75,060	330	Sri Venkatesa Mills Ltd.	20.00	10	1.00	1.00			12
75.00	230.12	413.40	144.91	Nil	40,260	...	Super Spinning Mills Ltd.	372.00cd	100	18.00	12.00	15.00	25.00	3
45.00	57 74	...	...	0.03	25,116	...	Thanjavur Textiles Ltd	24.50	10	0.90	1.20	2 00		3
16.78	47.17	118.22	67.47	1.13	21,600	...	Trichinopoly Mills Ltd.	14.25	10	Nil	0.50	1.50	1.60	12
202.50	89.19	1,499.02	928.37	4.06	n.a.	...	Travancore Rayons Ltd.	7.25	10	Nil	Nil	Nil		12
38.00	20.87	...	...	0.37	35,200	...	Tuticorin Spg. Mills Ltd.	9.06cdN	10	Nil	1.00	1.50		3
31.53	72 85	350 61	156 78	Nil	48 124	266	Vasanta Mills Ltd.	5.70	10	Nil	Nil	Nil*	Nil	3
32.75	93.89	295.96	65.32	0.01	32,248	...	Vijay Spinning Mills Ltd.	6.60	10	1.80	1.80	2 00		3
25 00	70 04	238.30	145.48	Nil	46,520	...	Vijayalakshmi Mills Ltd.	41.67	100	Nil	12 00	12.00	12.00	3
44 00	80 39	...	...	Nil	42,972	...	Vijayakumar Mills Ltd	180 00	100	7.50	9.00	10 50		6
16.00	12.61	109.44	55.42	Nil	24 980	...	Vijayeswar Textiles Ltd.	130.50xdxr	100	12.00	16.00			12
12.68	15.19	71.92	36 73	0.06	Nil	240	Virudhunagar Textile Mills Ltd. .	70.00	50	5.00	5 00	5.00		12

· 13 months period. — = Indicated loss carried forward. cd=Cum dividend. 'O'=Ordinary. A''O'= A' ordinary *15 months period. xd=Ex dividen N = Nominal.

CEMENT

In lakhs of rupees

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Company	Latest Available Quotation Rs.	Paid-up Per Share Rs.	Dividend per Ordinary Share 1977 Rs.	1978 Rs.	1979 Rs	1980 Rs.	Accounts Closed
74.58	97.79	1,251.69 (246.09)	362.45	8.84	Andhra Cement Company Ltd.	11.00	10	1.00	1.25	1.25	1.25	3
286.93	455.18	990.42 (12.75)	645.50	Nil	Dalmia Cement (Bharat) Ltd.	16.25cd	10	2.25	2.00	1.80		12
490.00	178.57	3.053.13 (179.84)	1,955.94	86.13	India Cements Ltd.	4.15	5	0.30	0.45	0.55	Nil	3
258.00	32.37	1,831.63 (24.75)	482.32	—85.91	Madras Cements Ltd.	128.00	100	Nil	Nil*	Nil	Nill	12
179.95	315.00	1,519.84 (166.11)	705.77	Nil	Mysore Cements Ltd.	30.25	10	1.25	1.25	1.25		6
130.95	380.51	2,406.62 (24.94)	1,189.50	– 120.57	Panyam Cements & Mineral Industries Ltd. ...	160.09	100	16.00	15.00	12.00	Nil	8
50.00	60.67	154.80	129.27	0.34	Travancore Cements Ltd.	14.05xd	10	1.20	1.20	1.50	1.50	12

PAPER & HARDBOARDS

252.71	404.60	9,278.11 (8,204.22)	620.23	Nil	Mysore Paper Mills Ltd.	34.50	10	1.00	1.00	1.00	1.00	3
199.12	25.77	753.98 (305.10)	434.04	Nil	Punalur Paper Mills Ltd.	6.25	10	Nil	Nil	Nil	Nil	3
525.00	329.58	3,426.04 (45 79)	1,112.88	81.42	Seshasayee Paper & Boards I td.	13.00	10	1.20	1.20	1.20	1.20	3

ENGINEERING

150.02	346.37	511.52 (4.83)	292.77	Nil	Best & Crompton Engineering Ltd.	38.50xd	10	1.50	1.50	1.75		12
127.35	193.01	332.35	134.81	0.13	Bimetal Bearings Ltd.	41.75	10	3.00	2.50	2.50		6
20.00	14.23	45.34	27.37	0.02	Coromandel Engineering Co. Ltd. ...	12.25	10	1.80	2.00	1.80		3
282.79	252.98	691.20 (11.11)	383.39	Nil	Ennore Foundries Ltd.	36.50	10	2.00	2.00	2.20		12
300.00	...	669.81	72.73	10.88	Lakshmi Automatic Loom Works Ltd.	18.35	10	Nil	Nil	Nil	Nil	3
253.99	394.92	1,358.35	838.21	Nil	Lakshmi Machine Works Ltd.	240.00	100	10.00	14.00	17.00		12
56.92	40.09	...	...	Nil	Indian Steel Rolling Mills Ltd.	19.00	10	2.00	2.20	2.20		3
90.00	69.54	360.87	63.04	12.35	Kunal Engineering Co. Ltd.	48.50	10	2.00	1.50	1.50	2.00	3
60 00	...	...	...	...	Revathi-CP Equipment Ltd.	26.00	10	...	...	...		12
41.75	...	...	...	...	Sivanandha Steels Ltd.	155.00	100	...	12.00	14.00		3
58.18	112.77	...	...	0.16	Sri Ramakrishna Steel Ltd.	150.00	100	12.00	12.50	15.00		3
225.00	25.93	334.05 (0.83)	98.76	Nil	Steel Complex Ltd.	8.90	10	Nil	Nil	Nil	Nil+	3
37.00	65.83	164.10 (3.19)	84.67	Nil	Trichy Steel Rolling Mills Ltd.	19.50	10	0.75	1.00	1.50	1.50	9

CHEMICALS & FERTILISERS

174.44	120.27	807.18 (28.04)	507.08	24.95	Chemicals & Plastics India Ltd.	200.00	100	Nil	15.00	15.00		3
30.00	...	...	...	...	Coimbatore Pioneer Fertilisers Ltd.	100.00cdN	100	9.00	12.00	12.00		3
1,533.12	2,491.56	6,051.57 (163.66)	4,623.75	10.68	Coromandel Fertilisers Ltd....	21.50	10	2.00	2.00	2.00	2.00	12
628.12	40.34	2,455.99 (69.23)	1,404.73	—432.52	E.I.D. Parry—(India) Ltd.	12.75	10	0.60	Nil	Nil		12
12,221.19	2.64	15,547.31	5,061.27	5,603.65	Fertilisers & Chemicals Travancore Ltd.	5.40	10	Nil	Nil	Nil		3
275.50	306.22	1,519.85 (30.36)	1,025.27	0.06	Mettur Chemical & Industrial Corpn. Ltd. ...	18.90	10	1.00	1.20	1.50	1.60	3
37.50	59.31	157.27	69.51	27.35	Mico Farms Chemicals Ltd.	180.00xd	100	15.00	15.00	15.00		12
16.00	45.55	123.92	80.56	0.14	Periyar Chemicals Ltd.	14.30	10	2.00	1.50	1.00		6
20.00	0.39	51.98 (3.07)	17.84	—2.52	Southern Nitro Chemicals Ltd.	11.75	10	Nil	Nil	Nil		12
1,696.40	...	10,958.14 (388.84)	4,996.52	—3,604.58	Southern Petrochemical Ind. Corpn. Ltd. ...	12.10	10	Nil	Nil	Nil	Nil	6
40.00	...	...	...	...	Tamilnadu Chromates and Chemicals Ltd. ...	16.00	10	Nil	Nil	Nil		3
159.33	133.74	479.67	156.03	Nil	Thirumalai Chemicals Ltd.	19.00	10	Nil	Nil	1.50		12
75.00	82.16	...	...	0.08	Travancore Chemical & Mfg. Co , Ltd.	14.00	10	1.00	1.50	1.50		6
140.00	157.03	486.96 (72.27)	143.60	Nil	Travancore Electro-Chemical Industries Ltd. ...	116.50xr	100	20.00	20.00	Nil	22.50**	6

SUGAR & BREWERIES

345.14	871.40	2,494.77 (20.00)	1,196.20	0.02	Andhra Sugars Ltd.	31.75	10	1.20	1.20	1.20	1.50	9
111.00	37.42	1,058.91	216.39	—23.18	Aruna Sugars Ltd.	9.20	10	Nil	Nil	Nil	Nil	9
231.75	159.65	343.17 (8.00)	193.56	8.44	Deccan Sugar & Abkhari Co. Ltd.	9.25	5	Nil	Nil	Nil		12
508.19	885.92	2,520.62 (106.12)	1,579.83	0.05	K.C.P. Ltd.	20.83xr	10	1.40	1.40	1.50	1.50	6
160.00	53.86	773.74	397.87	—215.66	Kothari Sugars & Chemicals Ltd...	13.90	10	Nil	Nil	Nil		6
134.75	79.65	1,055.08 (0.43)	647.33	—113.52	Mysore Sugar Company Ltd.	12.00xd	10	Nil	Nil	Nil		6
180.51	116.89	1,068.08	632.23	0.17	Sakthi Sugars Ltd.	16.65	10	Nil	Nil	Nil	1.20	6

% for 16 months period + for 9 months period N =Nominal — = Indicates loss carried forward * for 15 months period. ** for 18 months period.

PLANTATION COMPANIES

In lakhs of rupees					Company	Latest Available Quotation	Paid-up per Share	Dividend per ordinary Share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss Carried Forward		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
9.00	17.21	62.36	21.16	0.21	Alageswar Estates Ltd.	4.75	2	0.60	0.90	0.54	0.20	3
2.50	0.10	16.64	6.03	—5.58	Anandam Rubber Company Ltd.	13.35	10	Nil	Nil			12
12.08	38.68	43.08	11.24	16.27	Anaparai Estates Ltd.	6.75xr	2	1.00	1.00	1.00		6
13.39	18.08	36.56	8.26	3.67	Badra Coffee Estates Ltd.	8.00	2	0.90	1.00	1.00		5
27.69	19.59	81.59	30.94	2.09	Balanoor Tea & Rubber Co. Ltd.	29.00	10	4.50	3.00	3.00		5
24.66	6.17	64.63	29.45	0.16	Chembra Peak Estates Ltd.	2.30	2	0.32	0.47***			12
75.35	27.45	106.08	39.58	7.71	Cochin Malabar Estates Ltd.	18.00	10	0.42	0.52	0.68		2
72.00	38.82	110.94 (3.74)	33.27	2.64	Coffee Lands Ltd.	30.50	10	2.50	2.50	2.50	2.50	6
333.90	344.38	484.81 (12.22)	192.96	30.39	Consolidated Coffee Ltd.	30.50	10	2.50	2.50	2.50	2.50	6
9.60	26.72	39.11	15.63	Nil	Coorg Tea Company Ltd.	5.60cd	2	Nil	0.50	0.40		3
6.00	5.79	20.65	3.52	0.04	Cottanad Plantations Ltd.	9.50	10	0.50	0.50	0.50		3
8.17	29.71	16.66	6.95	0.38	Cowcoody Estates Ltd.	8.50	2	0.45	0.45	0.50	0.50	6
100.00	63.99	276.56	22.66	Nil	C.W.S. (India) Ltd.	15.00	10	n.a.	n.a.	1.20		9
15.00	5.49	49.38	34.23	Nil	Devashola (Nilgiri) Tea Estates CompanyLtd.	10.00	10	Nil	1.00	1.00		3
19.83	11.23	39.73	20.00	0.40	Devon Tea & Produce Co. Ltd.	22.75	10	4.50	3.00	3.00		5
43.75	14.34	125.39	51.61	Nil	Haileyburia Tea Estates Ltd.	10.25	10	2.50	1.00	1.00	Nil	12
54.00	45.25	134.49	49.23	0.07	Highland Produce Co. Ltd.	9.40	10	2.50	2.50	1.25	Nil	12
19.59	36.47	39.47	10.90	1.59	Kailas Rubber Company Ltd.,	5.20	2	0.12	0.12	0.30	0.40	2
20.00	34.30	52.23	18.50	Nil	Kalasa Tea & Produce Co. Ltd.	3.20	2	0.55	0.45	0.40		3
20.00	26.03	64.18	23.44	0.32	Kalpetta Estates Ltd.	20.75	10	2.00	1.50	1.50		6
25.76	50.71	79.79	27.59	0.27	Kil Kotagiri Tea & Coffee Co. Estates Ltd.	4.50	2	0.40	0.45	0.45		3
9.00	23.66	...	...	3.34	Kumergode Estates Ltd.	9.75	2	0.15	0.16			10
10.35	24.53	38.03	10.09	0.53	Kurchermala Plantations Ltd.	18.00	10	2.00	2.00	1.50		3
9.59	30.04	13.62	7.91	0.07	Lingapur Estates Ltd.	6.25	2		0.70	0.70		3
12.00	14.86	38.94	13.37	Nil	Lucky Valley(Nilgiri Hills) Tea EstatesLtd.	28.00xd	10	Nil	1.50	1.00		12
22.50	39.43	60.56	14.88	0.47	Malankara Rubber & Produce Company Ltd	53.00cr	10	2.00	2.00	4.00		3
3.25	9.05	31.47	2.25	8.32	Mercara Rubber Ltd.	9.35	5	0.50	Nil	Nil		6
40.50	62.06	168.85	49.83	4.88	Midland Rubber & Produce Company Ltd.,	17.50	10	2.00	2.00	2.00		3
2.25	11.50	7.47	2.97	0.43	Mysore Amalgamated Coffee Estates Ltd.	7.50	5	1.50	1.50	1.50		3
36.00	55.47	150.78	46.43	0.40	Neelamalai Tea & Coffee Estates Ltd.	5.05	5	1.50	1.25	0.50		6
30.00	85.67	61.44 (2.07)	...	...	Nelliampathy Tea & Produce Company Ltd.	3.00	2	0.60	0.60	0.30		6
14.06	5.23	52.29	17.48	...	Nilgiri Tea Estates Ltd.	9.00	10	Nil	1.00	Nil		3
25.87	130.97	164.93	43.02	2.59	Nonsuch Tea Estates Ltd.	12.00xd	4	0.60	1.00	1.00	0.88	12
14.62	29.66	21.00	8.20	0.17	Ossoor Estates Ltd.	6.25	2	0.60	0.48	0.48		3
5.59	11.00	28.70	4.02	0.49	Panchura Estates Ltd.	3.25	1	0.20	0.20	0.20		6
29.78	43.25	80.34 (1.91)	31.10	0.83	Parkside (Neilgherry Hills) Estates Co. Ltd.	29.00	10	4.50	2.00	1.80	1.60	6
21.25	35.61	111.16	48.78	0.66	Peermade Tea Company Ltd.	33.00	10	3.00	Nil	1.00		12
18.00	46.64	5.23	...	4.98	Peninsular Plantations Ltd.	12.65	10	0.80	0.80	1.20		2
92.71	139.30	327.02	136.45	0.79	Peria Karamalai Tea & Produce Co. Ltd.	3.40	2	0.40	0.40	0.40		2
16.50	47.03	114.29	12.75	0.10	Pullangode Rubber & Produce Co. Ltd.	8.75	2	0.50	0.30	0.50	0.50	3
10.50	45.80	66.21	9.37	0.02	Puthutotam Estates (1943) Ltd.	4.70	1	Nil	0.25	0.13		3
27.00	39.50	74.65	21.34	0.81	Rajagiri Rubber & Produce Co. Ltd.	18.75	10	1.00	1.00	2.00		6
4.00	13.82	7.60	2.02	5.75	Rajendra Coffees Ltd.	17.00xr	5	2.00	2.50	2.50		3
21.67	27.38	46.69	13.87	0.04	Sangameshwar Coffee Estates Ltd.	3.85	2	0.30	0.36	0.36		3
20.00	21.60	17.67	...	3.81	Savamalai Estates Ltd.	11.00	2	0.70	0.80			10
13.50	10.99	15.50	...	0.50	Sheveroy Estates Ltd.	3.90	2	0.40	0.40			6
33.75	49.74	96.31	38.54	0.90	Stanes Amalgamated Estates Ltd.	13.75	10	2.00	1.70	1.20		6
12.50	11.85	56.85	21.40	0.20	Talayar Tea Co. Ltd.	5.00xd	2	Nil	0.10			9
10.00	22.28	44.24	5.67	1.16	Teekoy Rubbers (India) Ltd.	23.00	10	1.20	1.20	1.50		3
9.37	18.29	40.84	2.11	0.28	Thamarapally Rubber Co. Ltd.	21.00xd	10	Nil	1.00			12
12.81	23.09	45.63	9.26	Nil	Thirumbadi Rubber Co. Ltd.	2.80	1	0.12	0.15			9
6.00	13.52	57.98	4.01	Nil	Travancore Rubbers Ltd.	24.00	10	Nil	Nil			12
41.00	31.20	115.16	...	5.09	Travancore Rubber & Tea Co. Ltd.	20.25xd	10	1.60	1.80			12
20.00	35.62	91.93	27.17	0.75	Tropical Plantations Ltd.	35.00xd	25	2.60	2.70			12
19.68	5.43	49.11	17.11	—8.06	Twyford Tea Co. Ltd.	8.75	10	...	Nil*	Nil		3
2.20	1.27	10.85	1.35	Nil	Udayagiri Rubber Co. Ltd.	12.25	10	2.00	Nil			12
49.35	84.45	127.02	78.60	Nil	United Nilgiri Tea Estates Co. Ltd.	15.40	10	2.25	2.50	1.75		3
24.64	36.01	41.08	9.33	1.41	Vaikundam Rubber Co. Ltd.	37.50	10	2.00	3.00			12
18.00	20.51	42.09	11.97	0.08	Velimalai Rubber Co. Ltd.	12.25	5	Nil	0.60	0.75		2
27.00	35.33	22.76	9.54	0.10	Wartyhully Estates Ltd.	5.25	2	0.60	0.48	0.48		3

TRANSPORT

33.47	5.40	...	...	...	Agrocargo Transport Ltd.	8.00	10	Nil	Nil	1.20	1.20	6
1,650.00	2,342.95	4,549.22 (223.76)	1,504.82	Nil	Ashok Leyland Ltd.	31.00	5	0.90	0.80	0.85		12
78.00	25.75	562.30	350.62	—275.21	Enfield India Ltd.	16 00	10	Nil	Nil	Nil		6
40.00	7.84	146.45	97.32	0.16	Mopeds India Ltd.	28.50	10	0.70	1.00	1.20		6
400.00	1,220.06	4,055.49	2,187.60	0.79	South India Shipping Corporation Ltd.	465.00xd	100	20.00	Nil	Nil	10.00	3
94.50	27.40	684.76 (64.05)	410.68	0.04	Standard Motor Products of India Ltd.	28.00	10	Nil	Nil*	Nil	Nil	3
426.30	480.62	1,438.28 (10.85)	938.15	30.17	Tube Investments of India Ltd.	18.00	10	1.00	1.25	1.45		12

OTHERS

11.90	...	...	...	...	Ahuta Welding Electrode Mfrs. Ltd.	100.00N	100	5.00	20.00	20.00		3
269.93	78.88	852.55 (6.73)	476.55	—47.04	Aluminium Industries Ltd.	18.85	10	1.00	Nil	Nil	Nil	3
24.00	39.96	102.70	38.92	0.65	Amrutanjan Ltd.	39.50	10	3.00	3.00	3.00	3.00	3
35.88	38.48	54.34	36.18	0.20	Aspinwall & Co. Ltd.	10.15xd	10	1.20	1.50	1.50	1.50	12
9.40	50.14	33.82 (0.55)	10.61	2.16	A.V. Thomas & Co. (India) Ltd.	15.00	10	1.50	1.50	1.50		12
680.00	307.72	3,681.95 (115.27)	2,730.52	—1,938.37	Binny Ltd.	40.00	100	Nil	Nil	Nil	Nil	6
79.28	53.61	228.82	35.65	0.25	Bundy Tubing of India Ltd.	23.00	10	Nil	Nil	Nil	1.40	7
49.00	55.46	167.33 (0.83)	110.13	Nil	Canara Workshops Ltd.	15.50	10	Nil	1.00	1.20		6
302.10	661.98	1,206.59 (51.45)	652.64	0 61	Carborundum Universal Ltd.	406.00	100	14.00	15.00	17.00	19.00	8
8.74	8.75	3.43	1.94	0.02	Central Scientifc Supplies Co. Ltd.	5.50	5	...	0.75	0.75		3
42.00	43.15	150.80	102.87	Nil	Deepak Insulated Cable Corporation Ltd.	14.50	10	Nil	1.00	1.25		3
17.47	20.04	40.94	10.41	2.28	Eddy Current Controls (India) Ltd.	21.50	10	1.00	1.50	1.50		6
25.00	65.97	76.74	36.25	Nil	Elgi Equipments Ltd.	34.00	10	1.80	1.20	1.40	1.60	3
100.80	208.26	368.01	271.64	Nil	Engine Valves Ltd.	36.50	10	1.50	1.50	1.60**	1.60	9
105.00	107.58	309.59 (8.58)	102.21	0.04	Facit Asia Ltd.	25.75xd	10	Nil	1.00	2.00	2.00	12

*** for 21 months period. cd=Cum-dividend —=Indicated loss carried forward. n.a.=Not Available Xd=Ex-dividend * 15 months period.

OTHERS

In lakhs of rupees					Company	Latest available Quotation	Paid-up per share	Dividend per Ordinary Share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depreciation	Profit/loss carried forward		Rs:	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
59.79	105.41	311.81	174.52	0.27	India Forge & Drop Stampings Ltd. ...	30.00	10	Nil	1.00	1.20	1.20	6
34.60	13.90	63.86	30.42	0.05	India Radiators Ld.	10.15	10	5.50	9.00	1.00@		3
87.00	2.64	101.70	64.70	—21.87	Jeewanlal (1929) Ltd.	2.50	10	Nil	Nil			12
40.00	64.69	180.66 (8.11)	84.83	0.56	Kar Valves Ltd.	27.00	10	Nil	Nil	0.75	1.00	9
140.80	15.00	518.84	19.37	—60.73	Keltron Component Complex Ltd.	10.37	10	...	...	Nil		3
382.17	592.49	1,073.73 (15.97)	722.57	0.50	Kirloskar Electric Co. Ltd.	35.00	10	1.10	1.10	1.10		6
470.99	472.86	3,046.26 (11.78)	1008.86	75.27	Kothari (Madras) Ltd.	37.75	10	1.00	1.20	1.50	2.00	6
75.00	...	...	...	...	London Rubber Co. (India) Ltd.	900.00	500	100.00	100.00	110.00		3
80.00	169.60	310.15	192.31	0.04	L. G. Balakrishnan & Bros. Ltd.	36.50	10	Nil	1.20	1.40		3
450.00	438.27	3,221.94	2,073.67	0.50	Madras Aluminium Co. Ltd.	87.00	100	Nil	Nil	Nil		12
22.50	65.70	199.68	78.29	1.94	Madras Vanaspati Ltd.	4.00	3	Nil	Nil	0.30	0.30	3
164.00	727.30	1,069.63 (86.80)	577.07	Nil	McDowell & Co. Ltd.	57.50	10	0.75	0.75	0 75		12
151.48	154.35	514.56	247.43	Nil	Mettur Beardsell Ltd.	129.00xd	100	20.00	15.00	15 00	·15 00	12
43.26	12.95	26.40	14.09	2.80	M. M. Rubber Co. Ltd.	14.00	10	1.80	1.00			9
365.61	657.59	2,378.30 (115.49)	1,319.62	Nil	MRF Ltd.	32.25	10	Nil	1.00	1.50		9
19.30	51.24	107.38	61.82	Nil	Mysore Lamp Works Ltd.	23.00xd	10	Nil	1.50			12
10.56	5.66	22.81 (0.10)	17.65	Nil	Mysore Stoneware Pipes & Potteries Ltd.	9.76	10	1.50	0.60	Nil	Nil	3
18.86	5.31	80.48	26.81	—11.44	Mysore Tobacco Co. Ltd.	6.15	10	Nil	Nil	Nil		3
41.37	22.31	138.57	65.59	0.42	Neiveli Ceramics & Refractories Ltd. ...	19.25	10	0.75	1.20	1.50		6
105.00	3.88	68.98	7.91	17.04	Pond's (India) Ltd.	77.50	10	n.a.	1.20	2 00		6
69.55	24.51	170.46	66.28	—107.90	Omega Cables Ltd.	25.00	100	Nil	Nil	Nil	Nil	12
145.00	32.89	453.58 (3.06)	78.91	Nil	Oriental Hotels Ltd.	32.00	10	Nil	Nil	Nil	1.50	6
28.00	2.08	94.92 (0.74)	63.46	—26.70	Parry's Confectionery Ltd.	1.63	1	Nil	Nil	0 075		9
72.00	110.82	288.66 (18.10)	96.38	Nil	Rane Brake Linings Ltd.	27.00xd	10	1.50	1.50	1.80		12
93.23	40.70	465.08 (15.20)	228.36	Nil	Rane (Madras) Ltd.	16.65	5	0.60	0.75	1.00	0.80	3
91.60	Nil	262.27	0.44	—17.93	Seshasayee Industries Ltd.	17.75xd	10	Nil	Nil			12
44.72	59.86	120.50 (1.28)	48.93	3.03	Simco Meters Ltd.	19.00	10	1.25	1.25	1.25		3
40.00	196.88	322.80	128.72	29.50	Spencer & Co. Ltd.	73.00	10	1.20	1.20	1.80	2.50	6
57.98	114.12	...	...	Nil	Southern Asbestos Cements Ltd.	338.00	100	20.00	20.00	20.00		3
27.89	160.53	...	...	0.18	S.R.P. Tools Ltd.	30.50cd	10	Nil	Nil	1.00		3
75.02	...	...	...	...	Sundaram Abex Ltd.	16.50	10	Nil	Nil	Nil		7
399.28	166.81	724.27 (1.79)	280.97	Nil	Transformers & Electricals Kerala Ltd. ...	10.00	10	1.20	1.20	1.20		3
34.69	55.56	28.43	20.32	Nil	T. Stanes & Co. Ltd.	15.00	10	1.50	1.50			3
45.80	10.89	16.47	5.50	0.06	Tubes and Malleables Ltd.	9.00xd	10	Nil	1.20	1.00		12
200.00	401.81	504.90 (26.70)	238.44	Nil	United Breweries Ltd.	37.50	10	0.75	0.75	0.75	0 75	3
25.00	22.07	247.42 (1.76)	148.86	—10.72	Wavin India Ltd.	11 .17	10	Nil	Nil	Nil		12
117.38	91.69	389.82	279.45	13.73	Western India Plywoods Ltd	-145.00	100	15.00	12.00			4
219.32	192.02	513.95	307.39	Nil	Wheels India Ltd.	32.00	10	1.20	1.50			12
137.36	132 60	416.30	204.14	Nil	Widia (India) Ltd.	415.00xd	100	15.00	16.00			12
117.67	259.25	698.65 (49.47)	197.10	22.19	W.S. Insulators of India Ltd.	35.00	10	1.00	1.20	1.50	1.50	9

AHMEDABAD

TEXTILES

In lakhs of rupees					Number Installed		Company	Latest available Quotation	Paid-up per Share	Dividend per Ordinary Share				Accounts Closed
aid-up inary apital	Reserves	Gross Block	Depreciation	Profit/loss carried forward	Spindles	Looms		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
1.25	19.12	495.14	280.10	—50.50	56,448	1050	Ahmedabad Cotton Mfg. Co. Ltd. ...	270.00	250	Nil	—	Nil*		3
0.94	134.88	429.81	231.94	Nil	37,644	602	Ahmedabad Kaiser-I-Hind Mills Co. Ltd.	250.00	100	10.00	18.00	18.00	18.00	12
7.45	1,014.42	6,386.20	3,763.17	367.92	2,05,276	864	Ahmedabad Mfg. & Calico Printing Co. Ltd.	254.00	125	Nil	Nil	Nil	18·00	3
0.71	106.65	454.44	215.33	3.35	31,008	536	Ahmedabad Shri Ramkrishna Mills ... Ltd.	410.00	250	Nil	32.00	32.00	27.00	3
0.00	253.51	861.03	400.70	4.08	38,624	764	Ahmedabad New Cotton Mills Co. ... Ltd.	217.50	100	22.00	22.00	22.00	19.00	12
1.95	100.26	334.07	208.77	0.03	31992	621	Ajit Mills Ltd.	257.50	100		Nil	18.00	15.00	3
5.00	409.86	1,062.08	519.52	Nil	52,724	1052	Aruna Mills Ltd.	189.00	100	17.00	22.00	22.00	18.00	12
0.25	1,084.01	2,082.41	972.67	....	96,280	1586	Arvind Mills Ltd.	418.00	100	20.00	25.00	25.00		12
4.65	19.59	374.44	241.98	—14.05	43,384	903.	Aryodaya Ginning & Mfg.Co.Ltd. ...	317.50	200		Nil	28.00	Nil	3
5.00	165.20	476.89	233.89	...	n.a.	n.a	Aryodaya Spg. & Wvg. Co. Ltd. ...	250.00	200		2.00	2.50		12
5.00	456.42	1.353.67	609.61	24.96	53,568	1233	Asoka Mills Ltd.	207.50	100	17.00	22.00	22.00	18.00	12
.32	38.31	246.71	159.79	...	26,568	540	Bharat Suryodaya Mills Co. Ltd. ...	175.00	100.00	...	..	12.00		12
.00	451.20	1,356.59	359.09	Nil	88,716	1506	Bharat Vijay Mlls Co. Ltd.	640.00	100	22.00	22.00	22.00	25 00	12
1.20	9.43	176.42	130.39	...	30,572	496	Bihari Mills Ltd.	360.00	200	...	25.00	Nil		12
.97	15.25	440.07	239.62	—2.89	39,100	744	Commercial Ahmedabad Mills Co. ... Ltd.	290.00	250	Nil	—	Nil*		3
3.83	290.21	1,332.92	809.37	0.39	75,732	806	Mahendra Mills Ltd.	262.50	100	12.50*	11.00	13.00	15.00	6
2.00	131.19	389.13	123.78	...	29,184	536	Maheshwari Mills Ltd.	380.00	12.50	Nil	1.50	6.25	3.00	3
.00	394.60	1,031.95	443.45	0.21	49,920	902	Maneklal Harilal Spg. & Mfg. Co. ... Ltd.	450.00	200	25.00	30.00	25.00	25.00	12
.22	0.86	166.39	136.54	...	37,324	735	Marsden Spg. & Mfg. Co. Ltd. ...	95.00	100	Nil	Nil	Nil	Nil	3
.00	...	363.88	268.71	...	58,320	984	Matulya Mills Ltd.	455.00	100.00	..	Nil	Nil	Nil	3
.60	1.25	194.98	144.31	...	38,188	706	Monogram Mills Co. Ltd.	83.00	100	Nil	Nil	Nil	Nil	3
07	98.62	241.39	155.54	2.48	36,800	708	Nagri Mills Co. Ltd.	770.00	500	25.00	50.00			12
.98	21.70	229.50	149.05	—109.83	34,584	720	New Jehangir Vakil Mills Co. Ltd. ...	104.00	200	Nil	Nil			4
.00	259.42	739.26	335.05	8.68	34,504	653	Nutan Mills Ltd.	200.00	100	23.00	25.00	25.00	19 00	12

15 months period   xd=Ex-dividend   —=Indicates loss carried forward.   ** For the period of 18 months   + Rs 100 shares subdivided into shares of Rs. 10 each during 1978-79

=Nominal   cd=cum-dividend

TEXTILES

In lakhs of rupees					Number Installed		Company	Latest available Quotation	Paid-up per Share	Dividend per Ordinary Share				Accounts Closed
Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms		Rs.	Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	
100.00	297.31	956.34	497.02	Nil	45,560	800	Raipur Mfg. Co. Lt d.	247.50	100	17.00	20.00	20.00	20.00	12
64.08	232.92	739.93	382.90	11.25	63,460	1,121	Rohit Mills Ltd.	177.50	100	13.00	14.00	14.00	19.00	12
36.00	153.70	492.36	204.61	...	26,624	508	Rustom Mills & Industries Ltd. ...	162.50	50	8.00	8.00	8.00		6
132.86	55.93	1,178.70	853.85	—51.71	96,848	1,697	Sarangpur Cotton Mfg. Co. Ltd. ...	230.00	200	Nil	Nil	Nil**	Nil	6
80.00	260.93	911.97	455.32	10.87	46,320	939	Saraspur Mills Ltd.	190.00	100	19.00	22.00	22.00	19.00	12
60.00	100.60	987.20 (12.19)	713.77	22.11	...	...	Sayaji Mill Ltd.	212.50	100	Nil	Nil	22.00		3
544.07	856.33	2,710.32 (12.74)	1,809.62	18.72	1,20,744	2,016	Shri Ambica Mills Ltd.	231.00	100	13.00	16.00	16.00	17.00	12
70.00	332.82	1,314.27	722.58	Nil	61,676	1,287	Shri Arbuda Mills Ltd.	357.50	100	15.00	17.00	17.00	17.00	12
20.46	19.74	348.54	204.44	—20.75	36,880	5,641	Silver Cotton Mills Co. Ltd. ...	325.00	100	Nil	Nil	Nil		12
25.00	9.99	342.27	203.55	—55.94	35,960	736	Tarun Comm ercial Mils Ltd. ...	125.00	100	Nil	Nil	Nil	Nil	12
42.00	83.77	336.43	213.41	...	50,080	844	Vijay Spg. Mills Ltd....	290.00	250	Nil	30.00			12

OTHERS

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
256.78	130.95	926.82	647.08	0.19			Alembic Glass Industries Ltd. ..	81.00	100	1.00	1.00	1.00		12
100.00	235.38	778.75 (19.39)	448.13	...			Anil Starch Products Ltd.	192.50	100	18.00	20.00			12
750.00	2,098.81	4,102.68 (158.38)	2,370.02	Nil			Atul Products Ltd.	315.00	100	20.00	20.00	20.00	20.00	12
120.00	174.00	585.10 (0.80)	279.68	0.06			Cellulose Products of India Ltd. ...	240.00	100	12.00	16.00	16.00	16.00	3
59.37	...	1,545.95	467.88	—255.58			Gujarat Alkalies & Chemicals Ltd. ...	55.00	10	n.a.	2.20	..	1.50	3
22.30	165.03	305.94	93.45	2.80			Testeels Ltd.	340.00	100	Nil	12.00	16.00		3
75.00	47.48	87.12	31.81	...			Universal Dyestuff Industries Ltd. ...	31.00	25	1.00	6.25	3.75	3.75	3

DELHI

TEXTILES

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
1,739.32 1.01	3,134.86	15,852.87 (366.30)	10,227.92	...	2,20,528	2,545	Delhi Cloth & General Mills Co. Ltd.	50.00	25 2.50	2.50 0.25	2.50 0.25	3.00 0.30	3.00 0.30	6
325.64	672.24	2,799.78 (116.61)	1,357.84	...	1,12,976	559	Modi Spg. & Wvg. Mills Co. Ltd.	13.25	10	1.80	1.40	1.50	0.60	4
98.05	61.61	172.39	70.46	...	...	...	Porrits & Spencer (Asia) Ltd. ...	15.75	10	1.60	1.80	1.00	1.60	9
50.00	35.28	187.38	23.42	...	...	...	Punjab Woolcombers Ltd.	17.75	10	Nil	Nil	Nil		6
373.12	...	1,255.24	333.41	—84.94	...	...	Shriram Fibres Ltd.	36.12	10	Nil	Nil	Nil		3
389.83	464.29	1,615.67 (13.40)	828.09	139.18	...	...	Swadeshi Polytex Ltd.	17.50	10	1.50	1.20	1.20		9
131.82	350.72	854.02 (34.61)	465.98	0.01	46,796	...	Vardhaman Spinning & General Mills Ltd.	8.00	10	Nil	Nil	1.20	1.80	3

PAPER AND HARDBOARD

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
55.00	97.23	268.13	61.03	0.97			Rollatainers Ltd.	27.50	10	1.20	1.50	1.50		9
448.62	115.22	1,493.36	26.22	—193.27			Seghal Papers Ltd.	9.00	10	Nil	Nil	Nil		6
24.87	14.68	52.21	11.36	0.05			Venus Papers Mills Ltd.	14.00	10	Nil	Nil	1.00		3

STEEL, METALS AND ALLOYS

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
36.66	11.39	143.72	34.94	3.17			Jotindra Steel & Tubes Ltd.... ...	28.50	10	Nil	Nil	Nil		3
9.00	84.15	479.03	121.51	0.37			Rathi Alloys & Steel Ltd.	26.00	10	Nil	Nil	Nil	1.00	6

ENGINEERING

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
69.82	45.53	170.90 (1.56)	45.30	5.09			Apollo Tubes Ltd.	16.00	10	0.60	—*	1.20	1.20	7
270.00	199.74	798.45 (31.11)	355.99	95.31			Bharat Steel Tubes Ltd	22.00	10	Nil	Nil	1.00		3
149.24	90.43	163.26	19.89	...			K. G. Khosla Compressors Ltd. ...	23.50	10	1.50	1.50	1.50		6

DYES, CHEMICALS & PHARMACEUTICALS

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
50.02	40.11	169.75	11.07	0.57			Bharat Alums & Chemicals Ltd ...	20.69	10	Nil	Nil	1.20***		7
37.32	48.19	125.12 (0.26)	33.58	—30.71			Curewel (India) Ltd	12.50	10	1.50	1.50	Nil		12
399.75	245.28	1,520.28	445.89	—488.95			Hindustan Electro-Graphites Ltd. ...	54.50	10	Nil	Nil	Nil		4
140.00	138.07	434.26 (26.56)	99.00	Nil			Ranbaxy Laboratories Ltd.	21.75	10	1.20	1.20	1.20	1.00	12
34.95	0.10	105.12	23.71	—24.42			Searsole Chemicals Ltd	17.75	10	Nil	Nil	Nil	Nil	4

AGRO INDUSTRIES & PROCESS FOODS

Paid-up Ordinary Capital	Reserves	Gross Block	Depre-ciation	Profit/loss Carried Forward	Spindles	Looms	Company	Latest available Quotation Rs.	Paid-up per Share Rs.	1977 Rs.	1978 Rs.	1979 Rs.	1980 Rs.	Accounts Closed
67.81	192.17	586.46 (118.56)	264.21	...			Amrit Banaspati Co. Ltd.	20.00	10	1.00	1.20	1.50		6
56.88	22.24	151.30 (6.67)	31.12	...			Milkfood Ltd....	14.25	10	Nil	1.00			12

* = 15 months period.　** = 18 month period.　*** = 13 months period　— = Indicates loss carried forward.

BREWERIES & MALTS

Paid-up Ordinary Capital	In lakhs of rupees: Reserves	Gross Block	Depreciation	Profit/loss carried forward	Company	Latest available Quotation	Paid-up per Share	Dividend per Ordinary Share: 1977	1978	1979	1980	Accounts Closed
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs	
49.73	0.13	124.83	29.09	—10.49	Hindustan Breweries & Bottling Ltd.	10.62	10	Nil	Nil			6
72.42	...	148.36	18.62	—86.31	Indo Lowenbrau Breweries Ltd.	10.12	10	Nil	Nil	Nil		6
151.45	184.54	541.83	174.25	...	Jagatjit Industries Ltd.	18.00xd	10	1.20	1.20			12
425.42	650.16	(6.31) 1,441.61	928.99	...	Mohan Meakin Ltd	8.75	5	0.70	0.70	0.70	0.50	3
79.88	15.38	(51.09) 202.36	83.68	—172.92	Punjab Breweries Ltd.	5.75	10	Nil	Nil	Nil		6
					OTHERS							
76.93	164.37	391.42	240.91	...	Atlas Cycle Industries Ltd.	30.00	10	Nil	2.00		2.50*	6
890.64	15.00	(2.17) 3,347.27	503.12	—461.13	J. K. Industries Ltd.	14.00	10	Nil	Nil			12
829.56	557.16	(34.79) 3,593.18	1,673.86	14.83	Modi Rubber Ltd.	36.00	10	Nil	Nil	1.50		10
59.11	49.37	(83.37) 200.42	85.47	11.81	Punjab Anand Batteries Ltd.	34.75	10	Nil	Nil	1.50	1.50	6
19.37	15.22	73.94	28.08	—37 11	Rathi Gases Ltd	29.50	10	Nil	Nil			12

— =Indicates loss carried forward. *15 months period.

PREFERENCE SHARES

BOMBAY

Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Last dividend: Amount per share (Rs.)	For period ended
COTTON AND OTHER TEXTILES						
Ahmedabad Advance Mills Ltd.	42.00	10.00	100	5TFC	7.14	31.3.80
Bradbury Mills Ltd.	4.50	14.75	50	7TFC	Nil	31.3.79
Central India Spg., Wvg. & Mfg. Co. Ltd.	546.25	10.00	500	10C	Nil	31.12.79
Elphinstone Spg. & Wvg. Mills Co. Ltd.	55.50	25.00	100	7C	...	...
Hindoostan Spg. & Wvg. Mills Ltd.	130.00	21.00	250	7RC	17.50	31.3.80
Jiyajeerao Cotton Mills Ltd. ...	84.0	100.00	100'B'	9.3RC	9.30	31.3.80
Khatau Makanji Spg. & Wvg. Co. Ltd.	55.00	29.92	100	4TFC	5.20	30.6.79
Laxmi Vishnu Textile Mills Ltd.	51.00	16.00	250	5½C	Nil	31.12.79
	130.00	15.67	500	7C	Nil	31.12.79
Mafatlal Fine Spg. & Mfg. Co. Ltd.	35.00	14.50	100'1st'	6.43R	6.43	31.3.80
	35.00	14.50	100'2nd'	6.43R	6.43	31.3.80
Morarjee Goculdas Spg. & Wvg. Company Ltd. ...	34.00	17.25	100	6.43C	6.43	30.6.80
New Great Eastern Spg. & Wvg. Co. Ltd.	50.00	8.00	200	5.5C	5.50	31.12.80
Podar Mills Ltd.	34.00	10.00	100	7C	7.00	31.12.80
	92.00	10.00	100	9.5RC	9.50	31.12.80
hreeniwas Cotton Mills Ltd. ...	33.00	4.80	100	5.20RC	Nil	31.12.80
tandard Mills Ltd.	52.50	6.00	100'1st'	5.72RC	5.72	31.3.80
	52.50	6.00	100'2nd'	5.72RC	5.72	31.3.80
vadeshi Mills Co. Ltd. ..	58.00xd	15.00	100	5TFC	7.14	31.12.80
ata Mills Ltd.	80.00	30.00	100	11RC	...	...
OTHER TEXTILES						
roda Rayon Corporation Ltd.	123.50	110.00	100	9.5RC	9.50	31.12.79
ntury Enka Ltd.	83.00	50.00	100	9.5RC	9.50	30.9.79
walior Rayon Silk Mfg. (Wvg) Company Ltd	89.50	148.27	100'A'	9.3RC	9.30	31.3.79
	83.00	200.00	100'C'	9 3RC	9.30	31.3.80
dian Rayon Corporation Ltd.	86.00	66.52	100'A'	10RC	10.00	30.6.79
	87.00	23.69	100'C'	11RC	11.00	30.6.79
	81.00	15.37	100'D'	9.5RC	9.50	30.6.79
tional Rayon Corpn. Ltd ...	33.00	174.24	100	5.55C	5.55	31.12.79
ymond Woollen Mills Ltd. ...	40.00	25.00	100	5TFC	6.50	31.3.80
ELECTRIC						
dhra Valley Power Supply Company Ltd.	43.00	49.34	100	7C	7.00	31.3.80
mbay Suburban Electric Supply Co. Ltd.	70.00	62.86	100	11RC	11.00	31.3.80
	...	50.00	100'2nd'	9.8RC	9.80	31.3.80
at Electricity Co. Ltd. ...	59.50	11.58	100	11RC	11.00	31.3.80
a Hydro Electric Power Supply Co. Ltd.	42.50	89.28	100	76	7.00	31.3.80
a Power Company Ltd. ..	47.00	86.97	100	7½C	7.50	31.3.80
	70.00	100.0	100'A'	11RC	9.25	31.3.80

Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent (Rs.)	Last dividend: Amount per share (Rs.)	For period ended
PAPER						
Sirpur Paper Mills Ltp. ...	42.00	70.93	100	6TFRC	7.80	30.6.78
West Coast Paper Mills Ltd. ...	43.00	90.00	100	6TFC	7.80	30.6.79
STEEL, METALS AND ALLOYS						
Khandelwal Ferro Alloys Ltd....	64.00	50.00	100'B'	9.5RC	9.50	31.12.79
Mahindra Ugine Steel Co. Ltd..	87.00	50.00	100	11RC	11.00	31.12.79
Tata Iron and Steel Co. Ltd. ...	57.00	75.00	150'1st'	6C	9.00	31.3.79
	51.00	375.00	100'2nd'	7½C	7.50	31.3.79
ENGINEERING						
Fit Tight Nuts & Bolts Ltd. ...	81.00	12.00	100	11RC	11.00	30.9.79
Kamani Engineering Corpn Ltd	30.00	15.00	100	7RC	7.00	30.9.79
Kirloskar Brothers Ltd. ...	20.00	15.00	25	9RC	2.25	31.7.79
	20.00	25.00	25	9½RC	2.38	31.7.79
Kirloskar Oil Engines Ltd. ...	7.75	20.00	10	9½RC	9.50	30.6.78
Larsen & Toubro Ltd. ...	37.00	13.00	100	5TF	6.50	31.3.80
	37.00	2.00	100	5TFR	6.50	31.3.80
	39.50	95.81	50	9.5RC	4.75	31.3.80
Mahindra & Mahindra... ...	68.00	100.00	100	9.8RC	9.80	31.10.79
Mafatlal Engineering Industries Ltd.	78.00	80.00	100	11RC	11.00	31.3.79
Poysha Industrial Company Ltd.	88.00	35.00	100	9½RC	9.50	31.3.80
Walchandnagar Industries Ltd..	60.00	60.00	100	10	10.00	30.9.79
DYES, CHEMICALS & PHARMACEUTICALS						
Arlabs Ltd.	59.50	2.43	100	8.325C	8.325	30.6.78
BASF India Ltd.	103.00	17.50	100	9.5C	9.50	3.6.79
Colour-Chem Ltd.	101.50	137.50	100	11RC	11.00	31.3.80
Dhrangadhra Chemical Works Ltd.	98.00	12.97	100	11RC	11.00	31.3.80
	78.00	25.00	1002nd	9.5RC	9.50	31.3.80
	78.00	35.00	1003rd	9.5RC	9.50	31.3.80
Indian Dyestuff Industries Ltd..	55.50	27.50	100	8 .58RC	5.58	31.3.80
Indian Organic Chemicals Ltd..	85.00	100.00	100	9.3RC	9.30	31.3.80
Tata Chemicals Ltd.	45.00	59.97	100	7.14RC	7.14	30.6.79
Zuari Agro-Chemicals Ltd. ...	85.00	412.50	100	9.5RC	9.50	30.6.79
SUGARS AND BREWERIES						
Bhopal Sugar Industries Ltd. ...	28.00	12.50	100	5TFRC	6.33	30.9.79
Hindustan Sugar Mills Ltd. ...	69.00	5.00	100	7.143C	7.143	30.9.79
Kesar Sugar Works Ltd. 1st pref.	35.00	15.00	100	5½RC	Nil	30.9.79
Maharashtra Sugar Mills Ltd. ...	197.50	5.00	250	10C	25.00	30.9.79
Ravalgaon Sugar Farm Ltd. ..	40.00	20.00	100	5½C	Nil	30.9.79

T.F.C. = Tax Free Cumulative. = Cumulative. R = Redeemable T.F.R.C. = Tax Free Redeemable Cumulative T.F.R = Tax Free Redeemable.

R. C. = Redeemable Cumuletive. TF. = Tax Free.

Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Last dividend	
					Amount per share Rs.	For period ended

MISCELLANEOUS

Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share Rs.	For period ended
Bajaj Electricals Ltd.	55.00	7.38	100	9.5C	9.50	30-6-79
	55.00	25.00	100	9.5RC	9.50	30-6-79
Blow Plast Ltd.	106.25	15.00	100	9.5RC	9.50	31-7-79
Bombay Potteries	80.00	1.13	100 1st	9½C	Nil	30-9-78
	80.00	8.63	100 2nd	9½C	Nil	30-9-78
Chowgule Steamships Ltd.	100.00	30.00	100	9.5RC	Nil	31-3-79
Goa Carbons Ltd.	128.00	25.00	100	9.5RC	Nil	30-6-78
Hindustan Construction Co. Ltd.	36.00	25.00	100	6½C	6.25	31-7-79
Hindustan Transmission Projects Ltd.	1.00	1.04	12.50	5.2	—	—
Indian Hotels Ltd.	84.00	55.00	100	9.3RC	9.30	31-3-80
Indian Hume Pipe Company Ltd	30.00	50.00	100	5C	5.00	30-6-79
Laxmi Starch Ltd.	67.50	12.50	100	10RC	10.00	31-3-80
Polson Ltd.	38.00	20.00	100	6RC	Nil	31-3-80
Premier Construction Co. Ltd.	36.00	10.00	100 1st	61/4C	6.25	31-12-79
	36.00	15.00	100 2nd	61/4C	6.25	31-12-79
	2.60	16.25	10 3rd	4½	0.45	31-12-79
Supreme Industries Ltd.	33.00	4.62	100	61/4C	6.25	30-6-79
Swastik Rubber	3.76	9.50	10	9RC	0.90	30-6-78
Tata Oil Mills Company Ltd	27.00xd	29.89	100	4½C	4.50	31-3-80
	70.00	35.00	100'A'	11RC	9.30	31-3-80

CALCUTTA

COTTON & OTHER TEXTILES

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Last dividend	
					Amount per share (Rs)	For period ended
Basanti Cotton Mills Ltd.	7.00	5.00	10	61/4TFC	Nil	31-12-79
Bharat Commerce & Industries Ltd.	86.00	25.00	1003rd	9.5RC	9.50	31-12-79
Birla Cotton Spg. & Wvg. Mills Ltd.	84.00	25.00	100	9.3RC	Nil	31-3-80
Bowreah Cotton Mills Co. Ltd.	85.00	6.00	100'A'	8C	10.40	31-12-79
	46.00	6.00	100'B'	7	9.10	31-12-79
Elgin Mills Company Ltd.	56.00	11.00	100	8C	62.40	1-1-74to
	3.87	4.20	10'B,	5C	3.90	31-12-79
Kesoram Industries & Cotton Mills Ltd.	83.00	20.00	100	10C	10.00	31-3-80
	80.00	99.84	100 2nd	9.3RC	9.30	31-3-80

JUTE TEXTILES

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs)	For period ended
Agarpara Company Ltd.	60.00	10.00	100	7C	Nil	31-3-76
Anglo India Jute Mills Co. Ltd.	56.00	40.00	100	7C	9.10	31-12-79
Auckland Jute Company Ltd.	43.50	10.00	100	5.5C	Nil	31-3-79
	35.00	15.00	100 2nd	4.5RC	Nil	31-3-79
Bally Jute Company Ltd.	98.00	30.00	100	10C	10.00	31-3-80
Birla Jute Mfg. Company Ltd.	56.50	23.64	100	7.5C	8.25	31-3-80
	81.00	75.00	100 2nd	9.3RC	9.30	31-3-80
Caledonian JuteMils Co. Ltd.	38.00	10.00	100	9.10	9.10	30-11-78
Chitavalash Jute Mills Co. Ltd.	75.00	5.00	100	9.1C	9.10	31-7-78
Dalhousie Jute Company Ltd	72.00	15.00	100	7.00C	9.10	31-3-80
Fort Gloster Industries Ltd.	60.00	14.00	100	7.00C	9.10	31-3-80
	40.00	7.00	100 2nd	7.00C	6.50	31-3-80
Fort William Jute Co. Ltd	50.00	10.00	100	7.00C	Nil	31-3-79
Ganges Mfg. Company Ltd.	76.00	6.00	100	8.00TFC	Nil	31-3-79
General Industrial Society Ltd.	98.00	11.81	100'A'	11RC	11.00	31-12-79
Gourepore Company Ltd.	40.50	26.50	100	8.75C	Nil	31-12-79
Hastings Mills Ltd.	34.00	25.00	100	6.00	Nil	31-3-80
	...	25.00	100	9.3RC	Nil	31-3-80
Howrah Mills Co. Ltd.	71.50	8.75	100	7C	Nil	31-3-79
	68.00	17.50	100	7C	Nil	31-3-70
Hukumchand Jute Mills Ltd.	64.00	40.00	100	7TFC	9.10	31-3-80
Kamarhatty Company Ltd.	66.00	16.00	100	6C	15.60	31-12-77 to31-12-78
Kelvin Jute Company Ltd.	25.00	10.00	100	...	Nil	31-5-78
Kinnison Jute Mills Co. Ltd.	17.00	15.00	100	7.5	Nil	31-3-75
Nellimarla Jute Mill Ltd	61.00	5.00	100	6TFC	7.80	3-7-76
NewCentral Jute Mills Co. Ltd.	100.00	33.00	100	7C	Nil	31-3-80
Northbrook Jute Company Ltd.	43.50	15.00	100	5.5C	Nil	31-3-80
Reliance Jute & Industries Ltd.	67.00	20.00	100	7TFC	9.10	31-3-79
Union Jute Co. Ltd	15.00	6.00	100	...	Nil	3-3-76

ELECTRIC

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs. lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs)	For period ended
Calcutta Electric Supply Corporation Ltd.	5.06	320.70	10	7.5C	0.375	31-3-80
Dishergarh Power Supply Co Ltd.	30.00	16.00	100'A	5C	6.50	31-3-80
	30.00	12.00	100'B'	4.5C	5.85	31-3-80

Company	Latest availabe quotation (Rs.)	Paid-up preference capital (Rs.lakhs)	Paid-up per share (Rs.)	Rate per cent	Last dividend	
					Amount per share (Rs.)	For period ended

ENGINEERING

Company	Latest availabe quotation (Rs.)	Paid-up preference capital (Rs.lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs.)	For period ended
Jay Engineering Works Ltd.	87.00	50.00	100	10RC	10.00	31-3-80
J. K. Steel and Industries	40.00	10.00	100	9.1RC	Nil	30-6-78
Kumardhubi Engineering Works Ltd	40.00	27.00	100	9.5	Nil	31-3-79
Shriram Bearing Company Ltd.	80.00	20.00	100	9.3TFC	Nil	30-6-79
Texmaco Ltd.	48.50	10.00	100	7.857C	7.857	31-12-79
	41.57	30.00	100	5.5RC	5.50	
	86.00	10.00	100	9.3RC	9.30	

SUGAR, BREWERIES & DISTILLERIES

Company	Latest availabe quotation (Rs.)	Paid-up preference capital (Rs.lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs.)	For period ended
Carew and Company Ltd.	43.50	8.00	100	6.5C	8.45	30-9-78
Cawnpore Sugar Works Ltd	51.00	10.00	100	8TFC	Nil	31-10-79
Gwalior Sugar Company Ltd.	70.00N	5.00	100	7C	7.77	30-6-79
	40.00N	6.75	100	7RC	7.77	30-6-79
Purtabpore Company Ltd.	7.00	6.00	10	10TFC	6.50	31-10-79
Ramnugger Cane & Sugar Co. Ltd.	50.00N	4.00	100	6TFC	7.80	31-8-77
Shree Krishna Gyanoday Sugar	20.00	6.00	100'A'	6C	Nil	30--67
	25.00	12.00	100'B'	5C	Nil	30-6-79

OTHERS

Company	Latest availabe quotation (Rs.)	Paid-up preference capital (Rs.lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs.)	For period ended
Alkali & Chemical Corporation of India	70.00	31.00	100	5C	5.00	30-9-78
Ballarpur Industries Ltd	92.00	147.49	100	9.3RC	9.30	30-6-79
Bengal Paper Mills Co. Ltd.	20.00	2.00	50	7TFC	Nil	31-12-78
	30.00	4.00	100'A'	7TFC	Nil	30-12-78
	25.00	20.00	100'B'	6RC	Nil	31-12-78
Dunlop India Ltd.	67.00	30.00	100	8CR	8.00	31-12-79
	40.00	40.00	100	5.5C	5.50	31-12-79
East India Hotels Ltd.	72.00	83.15	100	9.5RC	9.50	31-3-80
Electric Construction & Equipment Company Ltd.	74.00	8.20	100	11RC	11.00	31-10-79
Godfrey Phillips India Ltd.	41.00	30.00	100	6.875C	6.875	31-12-79
Graphite India Ltd.	90.00N	25.00	100	9.5RC	9.50	31-12-79
	...	25.00	100 2nd	9.3RC	9.50	3112-79
Hindustan Aluminium Corpn Ltd.	90.00	250.00	100	9TFRC	9.00	31-12-79
	93.50	250.00	100 2nd	9.3TFRC	9.30	31-12-79
Hindustan Motors Ltd	150.00	250.00	100	9.3RC	...	...
India Steamship Co Ltd	39.00	25.00	100	5TFRC	9.50	31-3-78
Metal Box Co. of India Ltd.	33.75	30.00	100	6RC	6.0	30-9-79**
National Rubber Mfrs Ltd.	30.00	10.00	100	6TFC	...	...
National Tobacco Co. of India Ltd.	66.00	25 00	100	5TFRC	...	...
	53.00	19.98	100 2nd	4.5TFRC	...	...
Rohtas Industries Ltd.	60.00	20.00	100	7 to 9TFC	Nil	31-3-80
	27.00	84.75	100 3nd	4½ to TFC	Nil	31-3-80
Shaw Wallace & Co. Ltd.	40.00	75.00	100	6C	2.43	31-12-79
Star Paper Mills Ltd.	55.00	10.00	100 2nd	5TFRC	6.50	31-3-78
	82.00	40.00	1004th	9.8CTR	9.80	31-3-78
Titaghur Paper Mills Co. Ltd.	78.50	11.50	100	8C	10.40	31-3-80
	32.00	15.00	100 2nd	4½	5.85	31-3-80

MADRAS

Company	Latest available quotation (Rs.)	Paid-up preferenc capital (Rs lakhs)	Paid-up per share (Rs.)	Rate per cent	Last dividend	
					Amount per share (Rs.)	For period ended
Andhra Cotton Mills Ltd.	100.00N	10.00	100	9 .5RC	...	...
Anglo-French Textiles Ltd.	70.00xd	18.00	100	9.5RC	9.50	31-12-79
Coimbatore Kamala Mills Ltd.	96.45	5.00	100	9.5PRC	...	...
Coimbatore Pioneer Mills Ltd.	32.88xd	1.00	100	11.0CT	8.45	31-12-78
Loyal Textile Mills Ltd.	47.00	14.99	100	5.0CTF	6.50	30-6-79
Sarvaraya Textiles Ltd.	88.67	2.71	100	7 8RC	...	...
Travancore Rayons Ltd.	6.00	50.00	10	5.0CTF	...	...
Vasanta Mills Ltd.	72.00	3.00	100	6.5CTF	Nil	31-3 80
	71.00	1.50	100	6.0CTF	Nil	
Vijay Spinning Mills Ltd.	92.59	8.00	100	9.5RC		
Virudhunagar Textile MillsLtd.	41.00	2.41	100	5.0CTF	6.50	31-12-78

SUGAR & BREWERIES

Company	Latest available quotation (Rs.)	Paid-up preferenc capital (Rs lakhs)	Paid-up per share (Rs.)	Rate per cent	Amount per share (Rs.)	For period ended
Andhra Sugars Ltd.	91.00	30.00	100	9.5RC	9.50	30-9-79
	100.00	30.00	100	9.5RC	9.50	30-9-79
Deccan Sugar & Abkhari Co. Ltd	2.40	7.00	5	7.5	Nil	30-9-78
India Sugar & Refineries Ltd.	74.00	11.00	100	9.5C	Nil	30-9-79
	75.00	9.00	100	9.5RC	Nil	30-9-79
Kirlampudi Sugar Mills Ltd.	68.00	6.00	100	5.5TFC	5.50	30-6-75
Premier Breweries Ltd.	100.00xd	10.00	100	9.5C	7.315	31-12-79
Sri Sarvaraya Sugars Ltd.	10.93	10.00	100	9.5C	28.50	77 to 79
South India Sugars Ltd.	...	1.65	10	11.0RC	Nil	31-10-79
	10.12	1.00	10	9.3TRC	Nil	31-10-79
Travancore Sugars & Chemicals Ltd.	3.50	15.00	10	6.5C	Nil	30-4-79

C = Cumulative. RC = Redeemable Cumulative TFRC = Tax Fee Redeemable Cumu'ative ** 18 months period. N = Nominal quotation.

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Last dividend: Amount per share (Rs)	Last dividend: For period ended

PLANTINGS

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Amount per share (Rs)	For period ended
Anandam Rubber Company Ltd.	7.50	2.50	10	7.0TFC	0.573	31-12-67
Cochin Malabar Estates Ltd ...	23.00	1.13	50	7.0C	3.53	28-2-80
Coffee Lands Ltd.	46.00xd	10.41	100	5.0TFC	5.31	30-6-80
Consolidated Coffee Ltd. ...	11.00xd	18.75	25	6.0TFC	1.56	30-6-89
Haileyburia Tea Estates Ltd ...	41.00xd	2.50	100	5.0C	5.60	31-12-79
Highland Produce Co. Ltd ...	5.35xd	3.00	10	6.0TFC	0.676	31-12-79
Peermade Tea Co. Ltd	65.00xd	1.50	100	6TFC	6.765	31-12-79
Pullangode Rubber & Produce Company Ltd.	5.42	1.50	10	6TFC	6.131	31-3-80
Rajagiri Rubber & Produce Co. Ltd.	4.75	22.60	10	6.0TC	0.608	30-6-79
Talayar Tea Co. Ltd.	6.10xd	7.50	10	7.0C	0.70	30-9-79
Thamarapally Rubber Co. Ltd. ...	3.25xd	0.75	5	6.5TC	0.654	31-12-79
Travancore Rubber & Tea Co. Ltd.	5.85xd	16.00	10	6.0TFC	0.6129	31-12-79
Udayagiri Rubber Co. Ltd ...	5.20	0.80	10	7.0TFC	0.784	31-12-77
Velimalai Rubber Co. Ltd. ...	5.25	2.50	10	7.0C	0.70	28-2-80

CEMENT

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Amount per share (Rs)	For period ended
Andhra Cement Co. Ltd. ...	67.00	2.49	100	6.0TFC	7.80	31-3-78
Dalmia Cement (Bharat) Ltd. ...	6.80cd	31.19	10	7.8C	0.90	31-12-79
India Cements Ltd.	50.00	33.35	100	7.5TC	8.33	31-3-79
Mysore Cements Ltd	100.00	70.00	100	11.0RC	11.00	30-6-79
Panyam Cement & Mineral Industries Ltd	93.00	13.64	100	9.3C	9.30	31-8-78
	94.75	11.36	100	9.5RC	9.50	31-8-78
	85.02	25.00	100	9.5RC	9.50	31-8-78

CHEMICALS

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Amount per share (Rs)	For period ended
Chemicals & Plastics India Ltd. ...	76.00cd	25.00	100	9.5RC	9.50	31-3-80
	103.50	25.75	100	9.0RC 'B' (Con)	9.10	
Coimbatore Pioneer Fertilisers Ltd.	100.00cd	8.00	100	11.0C		
E.I.D. Parry (India) Ltd. ...	9.70	40.00	10	11.0RC	Nil	31-12-79
Mettur Chemical & Industrial Corporation Ltd.	7.30	50.00	10	9.3C	0.93	31-3-79
Southern Petrochemical Industrials Corporation Ltd.	105.00	199.86	100	9.5RC	Nil	30-6-79

ENGINEERING

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Amount per share (Rs)	For period ended
dian Steel Rolling Mills Ltd. ...	6.35	5.50	10	[illegible].5CTF	0.715	31-3-80
i Ramakrishna Steel Ltd. ...	100.00	9.30	100	10.0RC	10.00	31-3-80

MISCELLANEOUS

Name of the Company	Latest available quotation (Rs.)	Paid-up preference capital (Rs lakhs)	Paidup per share (Rs)	Rate per cent	Amount per share (Rs)	For period ended
umnium Industries Ltd. ...	73.00	84.60	100	9.5TRC	Nil	31-3-80
any Ltd.	79.00	26.24	100	9.75C	Nil	30-6-79
field India Ltd.	54.00	10.00	100	9.5RC	Nil	30-6-79
sturi & Sons Ltd.	78.00	15.00	100	9.0RC	9.00	30-6-79
thari (Madras) Ltd.	7.50	18.00	10	9.3RC	0.93	30-6-79
dras Aluminium Co. Ltd. ...	94.00	143.16	100	9.8RC	...	...
dras Vanaspati Ltd.	94.00	8.00	100	5.5CTF	5.50	31-3-80
peds India Ltd.	10.00	5.00	10	10.0C	1.00	30-6-79
rce Leslie India Ltd.	72.00	15.00	100	9.3RC	9.30	30-9-79
halur Paper Mills Ltd. ...	100.00	50.00	100	9.5RC	Nil	31-3-78
he Brake Linings Ltd. ...	10.00xd	5.00	100	9.3RC	9.30	31-12-79
c (Madras) Ltd.	3.10	6.90	5	10.0RC.	0.50	31-3-80
hasayee Industries Ltd. ...	11.90xd	8.40	10	6.5CTF	Nil	31-12-78
ncer & Company Ltd. ...	3.95	23.20	10'A	6.5C	0.65	30-6-78
	5.15	36.80	10'B'	8.5C	0.85	30-6-78
ndard Motor Products of India td.	126.00	50.00	100	61/4TCF	Nil	30-6-78*
tern India Plywoods Ltd. ...	64.00	6.18	100	6.0CTF	...	...

DEBENTURES

BOMBAY

TEXTILES

Company	When issued	Issue price (Rs.)	Interest rate per cent	Amount outstanding (Rs. lakhs)	Latest available quotation
Ahmedabad Advance Mills Ltd. 1981-86	24-12-1956	100	8	30.00	88.00
Bombay Dyeing & Mfg. Co. Ltd (Rt.)	9-8-1979	100	11	375.00	75.00
Standard Mills Co. Ltd. (conv. deb)	1-7-1972	500	8	4.90	81.50
Svadeshi Mills Co. Ltd. 1990 ...	19-1-1965	1,000	11	100.00	74.00
Tata Mills Ltd. 1976-81	1-6-1966	...	7½	39.26	72.00
Do. 1983-85	9-8-1973	100	8	40.00	94.25

ELECTRIC

Company	When issued	Issue price (Rs.)	Interest rate per cent	Amount outstanding (Rs. lakhs)	Latest available quotation
Ahmedabad Electricity Co. Ltd 1895	18-3-1970	100	11	9,700.00	940.25
Andhra Valley Power Supply Co. Ltd. (B)—1995	1-10-1940	1,000	11	108.28	750.00
Do. (2nd and 4th) 1995 ...	24-5-1967	1,000	11	240.00	940.25
Tata Hydro Electric Power Supply Co. Ltd. 'B' 2 & 3 1995	4-11-1968	1,000	11	249.61	790.00
Do. 'B' 4th 1984-87	2-4-1976	1,000	8½	100.00	557.50
Tata Power Co. Ltd. 1st 'B' 1995 ...	3-2-1949	1,000	11	57.73	850.00
Do. 2, 3 & 5th 'B' 1995	4-6-1967	1,000	11	329.43	790.00
Do. 6th 'B' 1984-87 ...	12-4-1974	1,000	8½	200.00	880.00

ENGINEERING

Company	When issued	Issue price (Rs.)	Interest rate per cent	Amount outstanding (Rs. lakhs)	Latest available quotation
Associated Bearing Co. Ltd. ...	...	100	11	46.36	95.75
Bharat Forge Co. Ltd.—Rt. ...	23-12-1978	500	11	200.00	500.00
Central India Machinery Mfg. Co. Ltd. 1979-80	10-9-1966	100	11	25.00	95.00
Larsen & Toubro Ltd.—1981 ...	...	22	8	70.26	18.25
Do. —1981 ...	...	85	8	54.28	62.00
Mafatlal Engineering	14-11-1973	500	8	100.00	500.00
Mahindra & Mahindra Ltd.—1979-81	...	6	8	75.93	4.00
Tata Engg. & Locomotive Co. Ltd. 1985-89 ...	28-12-1950	100	10½	500.00	83.00
Do. 1976-81 ...	1-3-1956	100	7½	500.00	84.50
Do. 1975-82 ...	1-10-1969	100	73/4	819.44	83.00
Voltas Ltd.—1983-87	9-1-1964	100	10½	100.00	90.00
Do. —1986-90	24-11-1963	100	11	120.00	97.00
Walchandnagar Industries Ltd. 1980-84	15-5-1960	100	8	75.00	72.50

MISCELLANEOUS

Company	When issued	Issue price (Rs.)	Interest rate per cent	Amount outstanding (Rs. lakhs)	Latest available quotation
Bharat Bijlee Ltd.—Conv.	...	500	10	62.00	145.50
Camphor & Allied Products Ltd. ...	...	1,000	11	70.00	78.00
Do. —Conv. ...	20-3-1975	1,000	10	5000	123.50
Colour Chem Ltd.—1986-90 ...	1-4-1979	100	11	250.00	75.00
Cidco—1986	13-12-1971	980	7½	1,208.17	100.00(b)
Industrial Credit & Investment Corporation of India Ltd.—1980.	1-12-1969	4,975	6	500.00	88.25
Do. —1984 ...	20-6-1972	4,975	6	700.00	80.00
Do. —1985 ...	23-7-1973	4,975	6	800.00	88.00
Do. —1986 ...	23-7-1973	4.950	6½	900.00	90.50
Do —1990 ...	25-8-1975	4,875	6½	1,375.00	100.00
Do. Bonds—1999 ...	...	4,975	6½	4,510.00	100.00
Do. —1999 ...	...	4,975	6½	2,502.50	99.00
Mahindra Ugine Steel Co. Ltd.—Conv. ...	...	25	10½	237.50	30.00
Do. Non Conv. ...	...	91.50	101/2	457.50	76.00
National Rayon Corporation Ltd.—1979-82	10-9-1962	1,000	11	235.25	82.00
Rallis India Ltd.—1982-85	1-4-1970	100	11	100.00	87.00
Reliance Textile Industries Ltd Conv	29-9-1980	125	12	1,080.00	160.00
Siemens India Ltd.—1982-85 ...	22-2-1971	...	73/4	200.00	73.50
Sirpur Paper Mills Ltd.—1980 ...	14-9-1970	...	...	162.79	80.00
Tata Chemicals Ltd 'A' 1987(b) ...	24-7-1945	100	10½	2.02	85.00
Do. 1987 ...	9-3-1962	100	10½	8.30	62 50
Do. Conv. ...	...	10	10½	233.48	20 00
Do. Rs. ...	...	100	11	250.00	,,
Tata Iron & Steel Co. Ltd. 1983-87	...	1,000	8	1,580.00	630.00
Tata Oil Mills Co Ltd —1981-84 ...	2-9-1969	100	7 3/4	200.00	75.00
Do Conv 1985 ...	24-3-1976	35	10½	123.61	33.50
Do. Non conv 1985 ...	24-3-1976	30	10½	105.95	23.50

. = Right (b) = Quotations per Rs. 100 face value of debentures.

Beyond headlines

CDS with incentives

By P. CHATTOPADHYAY

THE Compulsory Deposit Scheme (Income Tax Payers) Amendment Ordinance, 1981 promulgated by the President on July 11, 1981, raises several important issues which require consideration. The compulsory deposit scheme for income tax payers that came into effect in 1974 had several laudable objectives behind. In the context of biting inflationary pressure, it was necessary that a part of the annual income of income tax payers was taken out of circulation, on the one hand, and canalised into productive lines, on the other. The two-fold effect of reducing the excess liquidity in the hands of income tax payers and effective deployment of the amount for purposes of government had some desirable effect on the economy. Though in the larger scheme of things the amount so impounded was small, the absolute figures were never negligible.

At the end of March 31, 1980, the outstanding amount held under Compulsory Deposit Scheme (Income Tax Payers) Act, 1974 stood at Rs 470.06 lakhs. Inclusive of the amounts maintained in terms of the Additional Emoluments (Compulsory Deposit) Act, 1974, additional wages account being Rs 4.11 lakhs, additional dearness allowance account (old) Rs 188.53 lakhs and additional dearness allowance account (new) Rs 322.49 lakhs, the total at the end of 1979-80 stood at Rs 985.18 lakhs. The highest outstanding amount was at the end of March, 1978 when the total amount stood at Rs 1,508.38 lakhs. The enhanced rates of compulsory deposits for income tax payers will yield some fifteen crores of rupees.

These figures of outstandings under the compulsory deposit scheme, however, relate only to the balances of amounts received at the offices of the Reserve Bank of India. It will be noted that almost all the nationalised banks and State Bank of India have received such deposits from income tax payers and have maintained separate accounts therefor. The total amount received as also the amount outstanding will be substantially higher if receipts at all these offices other than the Reserve Bank of India are also taken into account.

The ordinance raises the rates of compulsory deposit and specifies the period of application of the enhanced rate. The new schedule of rates applicable to different income classes is as follows :

(i) Where the current income exceeds Rs 15,000 but does not exceed Rs 25,000–4.5 per cent of the current incomes;

(ii) Where the current income exceeds Rs 25,000 but does not exceed Rs 35,000–Rs 1,125 plus 11 per cent of the amount by which the current income exceeds Rs 25,000;

(iii) Where the current income exceeds Rs 35,000 but does not exceed Rs 50,000–Rs 2,225 plus 12.5 per cent of the amount by which the current income exceeds Rs 35,000;

(iv) Where the current income exceeds Rs 50,000 but does not exceed Rs 70,000–Rs 4,100 plus 15 per cent of the amount by which the current income exceeds Rs 50,000;

(v) Where the current income exceeds Rs 70,000–Rs 7,100 plus 18 per cent of the amount by which the current income exceeds Rs 70,000.

It will be seen that the rates are effectively enhanced only for classes of assessees having an annual assessable income of more than Rs 50,000. For stages below this limit, the rates have not been tampered. And for making this small change, critics say, there was some drama enacted in view of the hurry with which the ordinance was promulgated and the urgency that this problems was shown.

Some of the objectives behind the compulsory deposit scheme stand negated when every year refund is allowed out of earlier deposits standing for a certain number of years. This refund adds to the current pressure on consumption and the annual deposits made by income tax payers are in effect reduced by the amounts of refund made during the year. Perhaps government could find out some alternative means for making this refund in other ways than cash. If CDS refund could be made by way of national saving certificates or the period of refund further extended by three years and amounts of refund not withdrawn allowed to carry interest at the rate of twelve per cent per annum, not only that government's purpose could be served but also that the income tax payers would remain satisfied with the interest rate which would be two per cent higher than fixed deposits for like periods.

In many cases, it has been the experience that the compulsory deposit scheme does not really initiate savings of the people. Income tax payers transfer from their bank account the amount required to be deposited under the CDS. However, though this amount comes by way of transfer from one account to another, there is the added condition that amounts outstanding under CDS cannot be withdrawn at will by the depositor. This deferment is rather small as an effect on the economy. Government can also think of giving some incentive to the depositors under CDS by way of a rebate of say five per cent on income tax corresponding to the amount deposited in CDS account. Thus, if the annual compulsory deposit amount of income tax payers comes to Rs 3,000, Rs 150 may be deducted from the amount of tax to be paid.

In addition, refund of interest allowed under the scheme every year may be totally exempt from tax. It will be recalled that annual refundable amount of CDS interest is to be included under the Income Tax Act in the assessable income of assessees subject to such ceilings and conditions that govern interest rates for assessment purposes. If incentives allowed for deposits under CDS are attractive, rate of deposit under the scheme can be further increased or an option may be given to assessees to deposit amounts higher than the required limits prescribed under the Compulsory Deposit Scheme (Income Tax Payers) 1974 as amended. Very recently government has made withdrawal of CDS refund voluntary and such amounts as the depositors are entitled to withdraw will earn interest at the same rate as applies to amounts held under CDS. The net effect of this change has been rather negligible.

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